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UNIVERSITY OF ALBERTA

SOCIAL INTEGRATION AND SUICIDE IN CANADA

BY

RITA L. VOS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS

IN

DEMOGRAPHY

DEPARTMENT OF SOCIOLOGY

EDMONTON, ALBERTA

SPRING 1990

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SUBMITTED BY RITA L. VOS

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS

IN DEMOGRAPHY.

Frank Trovato

George K. Jarvis

Anne Marie Decore

Date: April 18, 1990

ABSTRACT

The motivating question here is how social integration is related to suicide in Canada. The Durkheimian tradition was chosen for the theoretical framework. His discussions of integration and regulation as well as his four types of suicide form an integral part of the thesis. Five variables were chosen to test four dimensions of social integration which were derived partly from Durkheim's work and partly from more recent research. The percentage of people stating no religious preference was chosen to measure the religious individualism dimension. Age-sex specific divorce rates and married female labor force participation were chosen to measure the domestic integration dimension. The rate of unemployment is used to test the dimension of economic anomie. The last variable, intra-provincial mobility was used to capture the disintegrating effects of moving. Data for these variables were taken from a variety of sources and collected for nine of the ten provinces in Canada for the years 1971 and 1981. Prince Edward Island was omitted due to a lack of necessary information. The statistical procedure employed is Weighted Least Squares Logistic Regression. The results show that, in general, most of the hypotheses are supported for 1971. In 1981, the hypotheses dealing with married female labor force participation and unemployment are not supported. The results indicate that higher levels of these variables are associated with lower suicide rates. This seems to indicate that as the events become more common, society adjusts and they are less disintegrating then when their rates are lower. The hypothesis dealing with intra-provincial mobility is outright rejected as it failed to correspond to the theoretical relationship. It may be that the theory surrounding this variable needs to be corrected in order to take into account the interdependence between unemployment and mobility. The correlation coefficients for these two variables were consistently negative. It may be that as unemployment increases people move less and hence suicide tendencies are not affected.

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Chapter 1: Introduction

The motivating question behind this thesis is how the Durkheiman concept of social integration is related to suicide in Canada. Age-sex specific rates are analyzed for two points in time, 1971 and 1981, for nine of the ten Canadian provinces. Prince Edward Island is omitted due to a lack of necessary data. Four dimensions of social integration are identified; religious individualism, domestic integration, economic anomie and mobility effects. Observable indicators are used to operationalize these abstract dimensions.

Research on suicide in Canada based on the Durkheiman theory is scarce. The work that has been done tends to focus on certain sub-populations in Canada. This analysis goes beyond previous research by including age and sex specific rates for provinces. This analysis over two points in time should allow one to determine what impact our changing society has had on the suicide rate. During the study period Canadian society has witnessed significant changes such as a dramatic rise in divorce. The results may also help identify risk factors and thus contribute to better intervention programs.

The organization of the thesis is as follows. Chapter 2 provides a brief review of Durkheim's theory with regard to his four types of suicide that are organized along the dimensions of integration and regulation. Recent criticisms of Durkheim's theory are reviewed, the major criticism seems to be his inability to distinguish conceptually between integration and regulation. Gibbs and Martin's status integration perspective is also reviewed in Chapter 2. Their re-statement of Durkheimian social integration theory is presented briefly, followed by research done using their reformulation.

The second section of Chapter 2 presents the development of five hypotheses to be assessed empirically and the rationale used to generate them. Briefly, these are the hypotheses:

H1: Provinces with a higher percentage of people stating no religion will have higher suicide rates.

H2: Provinces with high rates of divorce will have higher suicide rates.

H3: Provinces with higher rates of married female labor force participation will have higher suicide rates.

H4: Provinces with high rates of unemployment will have higher rates of suicide.

H5: Provinces with a higher percentage of intra-provincial mobility will have higher rates of suicide.

Chapter 3 discusses the methods used in the analysis. It contains information on the data used and the operationalization of the variables in the hypotheses. A brief discussion on the problems with using official statistics in studies of suicide is included here also. Chapter 4 contains a discussion of descriptive statistics associated with the variables and the overall patterns of relationships among them. Also this chapter consists of the results from the multivariate analysis. Chapter 5 attempts to pull together the results and generate meaningful conclusions. Implications resulting from this research and areas for future study are also discussed.

Chapter 2: Theory

2.1 Social Integration Theories of Suicide

This section is intended to give a brief review of the two major theories of suicide that use the concept of social integration. The major thesis underlying this paper is how social integration relates to suicide; therefore, it would be beyond the scope of the paper to include the numerous other theories of suicide. (A number of authors have written on this topic, more notably Lester (1983), Douglas (1967), and Gibbs and Martin (1964)). The two chosen for review are the Durkheiman (1951) theory of suicide and Gibbs and Martin's (1964) status integration perspective. These are the two theories that are most relevant to this study due to their use of the concept of social integration.

2.1a. Durkheim's Theory[1]

Durkheim's theory is the basis of many other studies on suicide and it is best reviewed by discussing his four types of suicide and the rationale behind them. All four types revolve around two dimensions, integration and regulation. When "integration is low, egoistic suicide results; when it is high, altruistic suicide results; when regulation is low, anomic suicide results; when it is high, fatalistic suicide results (Breault and Barkey, 1982:321).

In discussing the concept of integration Durkheim (1951:208-209) was led to the following propositions;

> 1) Suicide varies inversely with the degree of integration of religious society.
> 2) Suicide varies inversely with the degree of integration of domestic society.
> 3) Suicide varies inversely with the degree of integration of political society.
> General Conclusion: Suicide varies inversely with the degree of integration of the social groups of which the individual forms a part.

---

[1]Unless otherwise indicated all quotations in this section come from indicated pages in Durkheim. 1951.

In order to see how each of the above propositions was derived, a brief review of each follows.

Durkheim (1951) was concerned with the three main religious denominations of his time namely, Catholic, Protestant and Jewish. Jewish people had lower rates of suicide than either Catholics or Protestants and Catholics had lower rates of suicide than Protestants (Jews < Catholic < Protestant). Focusing on the Catholic-Protestant difference Durkheim attempted to explain how two religions that equally condemned suicide could have such different rates.

> not only do they penalize it morally with great severity, but both teach that a new life begins beyond the tomb where men are penalized for their evil actions and Protestantism as well as Catholicism numbers suicide among them. (157)

He gave two reasons, the first was the "spirit of free inquiry that animates" Protestantism (158) and the second was that Protestantism did not emphasize common practices or beliefs. The Catholic Church, on the other hand, emphasized greater interaction among members and held a number of common beliefs and practices. The Catholic accepted his faith ready made without any questions.

> the greater concessions a confessional group makes to individual judgment, the less it dominates lives, the less its cohesion and vitality. (159)

Therefore, Protestants had higher rates of suicide because they were less well integrated into their religion than were Catholics.

Jewish individuals had the lowest rates of suicide and Durkheim (1951:156) explained it this way

> Obviously, the less numerous confessions, facing the hostility of the surrounding populations, in order to maintain themselves are obliged to exercise severe control over themselves and subject themselves to an especially rigorous discipline.

To sum up his section on religious denominations, Durkheim (1951:170) says,

> The beneficent influence of religion is therefore not due to the special nature of religious conceptions ... but because it is a society. What constitutes this society is the existence of a certain number of beliefs and practices common to all the faithful, traditional and thus obligatory.

Since the Protestant church had fewer of these beliefs and practices, they were less able to support collective life. This meant a low degree of integration in religious life and thus a greater tendency toward suicide.

Durkheim's (1951) second proposition concerns domestic life, he observed that unmarried people commit suicide more than married people. In order to explain these events he calculated the "coefficient of preservation" (177), which is a number showing "how many times less frequent suicide is in one group than in another at the same age" (177). Using this coefficient he found that, over the age of twenty, married persons had lower rates of suicide than unmarried people, widowed people had slightly higher rates than married people but not as high as single. There were significant gender differences among married and widowed individuals but it varied for each different society. Generally, married men were better protected from suicide than were married women.

Durkheim (1951) felt that the most probable explanation for the differences between the marital statuses was family size. He believed that larger families were more integrated because they required more interchange of ideas. His final conclusion concerning the family was

> Just as the family is a powerful safeguard against suicide, so the more strongly it is constituted the greater its protection. (202)

In his final proposition, Durkheim (1951) dealt with political society focusing mainly on political upheavals and their results. Suicide during times of political crisis fell and he concluded that it was not the crisis itself but rather that men pulled together and thought less of themselves. This interaction produced the lower suicide rates and tended to

outlive the crisis especially when it was intense. It can thus be said that societies characterized by political crisis are more highly integrated.

All of the above social environments have in common one aspect, integration. Each has the ability to integrate individuals by requiring interaction with other members in the environment. Individuals who are not integrated into any one of the three social environments tend to have a greater propensity toward suicide.

> Excessive individualism not only results in favoring the action of suicidogenic causes, but it is itself such a cause. It not only frees man's inclination to do away with himself from a protective obstacle, but creates this inclination out of whole cloth and thus gives birth to a special suicide which bears its mark. (210)

Egoistic suicide thus occurs when an individual is not sufficiently integrated into society; any shock to his existence leaves him easy prey to a suicidal inclination. Protestants and the unmarried are the least well integrated and are thus at greater risk to suicide.

The converse of egoistic suicide is altruistic suicide, it is characterized by being too strongly integrated into society.

> Having given the name of *egoism* to the state of the ego living its own life and obeying itself alone, that of *altruism* adequately expresses the opposite state, where the ego is not its own property, where it is blended with something not itself, where the goal of conduct is exterior to itself, that is, in one of the groups in which it participates. So we call the suicide caused by intense altruism *altruistic suicide*. (221)

Durkheim (1951) felt that this type of suicide was most prevalent in primitive and military societies. In most of the instances cited, the individual was forced by law or custom to commit suicide. Examples of this include the Hindu custom where personal followers and the wife of a deceased chief killed themselves because custom dictated that they not survive the chief. A second example, from modern times, are the Kamikaze Japanese pilots who flew during World War II.

The second dimension developed by Durkheim (1951) was regulation. His discussion of regulation was not nearly as indepth as the integration dimension. He merely stated that society's power over the individual was regulation and one of the major ways in which society controls individuals is through the economy. Durkheim showed how in times of both financial crises and prosperity suicide rates increased. The one common thread running through these seemingly distinct events was the rapidly changing rules that govern the economic sphere. Individuals are no longer able to function properly, their roles are unclear and thus are said to be unregulated.

> If therefore industrial or financial crises increase suicides, this is not because they cause poverty, since crises of prosperity have the same result; it is because they are crises, that is, disturbances of the collective order. Whenever serious readjustments take place in the social order, whether or not due to a sudden growth or to an unexpected catastrophe, men are more inclined to self-destruction. (246)

Durkheim observed that countries with higher proportions of divorced individuals had higher suicide rates and thus he concluded that they were unregulated. He attributed this to a lack of matrimonial regulation; divorced individuals had few established rules of conduct by which to live. They were no longer regulated by the rules of matrimonial society and their roles in society were no longer clearly defined. He noted that it was men more than women who committed suicide once divorced.

Anomie is the word Durkheim (1951) used to describe suicide which resulted from deregulation, it indicated "an abrupt loss of role and described the anxiety, even panic of people forced to adjust to a dramatically different social environment, with little or no warning" (Selkin, 1983:5).

> Anomy, therefore, is a regular and specific factor in suicide in our modern societies. So we have here a new type to distinguish from the others. It differs from them in its dependence, not on the way in which individuals are attached to society, but on how it regulates them. The third sort of suicide, the existence of which has just been shown, results from man's activity's lacking regulation and his consequent sufferings. By virtue of its origin we shall assign this last variety the name of *anomic suicide*.(258)

Actually, anomic suicide is not the last of Durkheim's suicides, he discusses one more type which results from excessive regulation.

This fourth type of suicide seems to have been included only as an after thought. Fatalistic suicide was introduced and discussed in a footnote.

> It is the suicide deriving from excessive regulation, that of persons with futures pitilessly blocked and passions violently choked by oppressive discipline. It is the suicide of very young husbands and of the married woman who is childless. (276)

It seems that this type of suicide was derived only to balance out his typology, he did not see it as being a major force in society and his discussion of it ended with the footnote.

The above discussion outlined the major ideas included in Durkheim's theory. Several criticisms have been launched by a number of researchers, one such criticism is that Durkheim selectively chose the data to support his theory (Selkin, 1983). This may be true but the ground breaking work done by Durkheim seems to outweigh this criticism. Giddens (1971:35) says that,

> Durkheim's achievement was to provide a fully comprehensive treatment of the phenomenon of suicide, and to offer an explanation which could be modified and added to, but which in principle seems unassailable.

The mistakes made by Durkheim can be corrected by contemporary researchers and this has been done to some degree, the modifications made will be discussed later.

Probably the most dominant criticism of Durkheim is that concerned with his dimensions of integration and regulation. One of the earliest critics was Barclay Johnson (1965) whose major goal was to reduce Durkheim's theory down to "one cause of suicide". After eliminating both altruistic and fatalistic suicide as irrelevant, Johnson attempts to prove that egoism and anomie are actually the same both empirically and conceptually. The two supposedly empirically coincide because

> anomie, the absence of social regulation, is by definition one characteristic of egoism. Moreover, if all of the properties of egoism vary together, so that if any one increases or decreases, the others must also, then anomie and egoism must coincide empirically. If one is present the other will be also. (Johnson, 1965:883)

He then goes on to show how these two types are conceptually identical.

> According to Durkheim's own practice then, a legitimate definition of anomie must encompass not only the absence of social regulation but the other two aspects of egoism as well. Anomie and egoism are thus identical conceptually as well as empirically. (Johnson, 1965:884)

Johnson's (1965:886) final reformulation of Durkheim states that " the more integrated (regulated) a society, group or social condition is, the lower its suicide rate" and alternatively, " the higher the level of egoism (anomie) prevailing in a society, group or social condition, the higher the suicide rate."

Johnson's (1965) reformulation is based entirely in theory with no empirical test of his ideas. Irving Rootman (1973:93) used Johnson's ideas and concluded that

> the data cast doubt on his (Johnson's) suggestion that integration and regulation are identical conditions. The findings rather suggest that the latter may not be as important as the former in determining the suicide rate, and it may therefore eventually be eliminated from the model on empirical grounds. However, it is not yet clear that regulation has no importance as a determinant of the suicide rate, and therefore it should be retained in the model for the time being at least.

Rootman's (1973) cross-cultural study casts some doubt on Johnson's theory thereby indicating that more empirical work is in order.

Johnson, however, does not stand alone as Whitney Pope (1976) came to a similar conclusion. According to Pope (1976), if a researcher wants to distinguish between integration and regulation, empirical variables must be used. However, no new ones since Durkheim have been used and thus " it is impossible to operationalize the integration-regulation distinction, which is thereby eliminated in empirical applications of Durkheim's theory" (Pope, 1976:44-45).

This criticism of Durkheim has yet to be resolved and it will take a great deal of empirical work to decide the issue. The analysis undertaken here, in no way attempts to add to this work, the view adopted here is that there is indeed a conceptual distinction between integration and regulation but that empirically they seem indistinguishable.

2.1b. Gibbs and Martin's Status Integration Theory

Gibbs and Martin's (1964) status integration theory is a reformulation of Durkheim's theory that is testable. They believe that the concept of social integration makes Durkheim's theory untestable, thus they developed five postulates that lead to one testable theorem.

> Postulate 1: The suicide rate of a population varies inversely with the stability and durability of social relationships within that population.
> Postulate 2: The stability and durability of social relationships within a population vary directly with the extent to which individuals in that population conform to the patterned and socially sanctioned demands and expectations placed upon them by others.
> Postulate 3: The extent to which individuals in a population conform to patterned and socially sanctioned demands and expectations placed upon them by others varies inversely with the extent to which individuals are confronted with role conflicts.
> Postulate 4: The extent to which individuals in a population are confronted with role conflicts varies directly with the extent to which individuals occupy incompatible statuses in that population.
> Postulate 5: The extent to which individuals occupy incompatible statuses in a population varies inversely with the degree of status integration in that population.
> Theorem: The suicide rate of a population varies inversely with the degree of status integration in that population. (Gibbs and Martin, 1964:521-522)

The five postulates and one theorem make up the essence of Gibbs and Martin's perspective.. The language they use is somewhat abstract and thus some definitions of the major concepts are helpful.

"A 'population' refers to categories defined by age, sex, marital, or occupational or other statuses" (Schalkwyk et al., 1979:1064) and a status is a socially recognized category of individuals distinguished by their roles (Gibbs, 1982:234). Maximum status integration

is obtained in a population if knowledge of all but one of any members achieved statuses makes it possible to predict the remaining achieved status correctly (Gibbs, 1982:229). The integration of two or more statuses is defined as the degree to which the population is concentrated in the configuration that comprises these statuses (Gibbs, 1982:229). This last definition is the empirical measure of status integration.

The theory is tested using contingency tables. Since it is assumed that movement into and out of statuses is part of status incompatibility, ascribed statuses are never entered into the rows of these tables (Gibbs, 1982:229). There are three basic calculations that can be done on each table. The elementary integration measure is the proportion of a column total in a column cell (Gibbs, 1982) which is called a "within-column test" and the value P is the measure of importance. The "between-columns" test looks at values of P^2 and the "total-column" test would look at the sum of P^2 (Gibbs, 1982). The significance of each of these measures depends on the achieved status entered into the table.

Gibbs (1968:529-532) has set out four test conditions for the theory

1. The greater the number of status families that enter into integration measures, the greater the inverse association between these measures and the suicide rates.
2. The greater the variation in the suicide rates of populations, the more inverse will be the association between those rates and measures of status integration among these populations.
3. The greater the median size of the populations, the greater will be the inverse association between suicide rates and measures of status integration among these populations.
4. The greater and more constant the average duration of occupancy among a series of status configurations, the more inverse will be the association between suicide rates and measures of status integration among these configurations.

These four principles specify the ideal ways in which the theory could be tested, deviation from them would yield negative results.

Adequate tests of the theory are hampered by available data since all possible statuses need to be represented in order for the theory to be truly tested. The majority of empirical work has been unidimensional, that is only one achieved status has been tested,

with marital or occupational integration being the statuses most often used. Results from these tests have been unimpressive; even when the signs have been in the expected direction, the coefficients have not been at a level in which to place confidence. Stafford and Gibbs (1985) attempted to overcome this problem by using a simultaneous measure. They found that measuring employment, household, marital and residential integration simultaneously did not support the theory. In a later paper, Stafford and Gibbs (1988) show that contrary to past tests, marital integration is largely irrelevant for U.S. age groups when occupational integration is controlled.

Due to the poor results from the tests, Stafford and Gibbs (1985:656-658) offer some suggestions :

> Nonetheless, the findings clearly indicate that there is a major problem with the theory, and there are only three alternatives.
> 1. Obtain data that permit an even more inclusive simultaneous measure of status integration, one that encompasses more than four sets of achieved statuses. ... the first strategy is not promising.
> 2. Devise some other arrangement of data or some other formula for expressing the amount of status integration in "between-column" tests.
> 3. This is more complex because it calls for revision of the theory. The present finding clearly suggest that a critical assumption of the theory - that all statuses are relevant and to approximately the same degree - may have to be abandoned.

These authors suggest that the most viable alternative is that several dimensions of status integration could be relevant in all populations, but not the same dimensions in all populations. The initial purpose of the theory seems not to have been fulfilled. Gibbs and Martin (1964) have failed to reformulate Durkheim and develop a testable theory. Any theory that has been proven wrong as often as status integration cannot be considered seriously, but it may yet prove beneficial to the study of suicide once more work is done.

2.2: Variables In The Analysis : Review of Literature

The research question to be explored is how social integration is related to suicide for Canada. Much of the following discussion is drawn from Durkheim's work, however, research done since his time will also be incorporated into the discussion. Variables will be chosen to reflect the dimensions indicated below. It should be noted that these dimensions tap elements of both integration and regulation, although no attempt will be made to resolve the issue of the distinction between them.

1. Religious Individualism
2. Domestic Integration
3. Economic Anomie
4. Mobility Effects

These are unmeasurable dimensions of social integration and each will be discussed below. The discussion will focus on the relevant literature and the variables chosen to measure the dimensions.

The relationship between religious denominations and suicide has changed since Durkheim's time. Attempts to replicate Durkheim's finding, that Catholics had lower suicide rates than Protestants, have been largely unsuccessful but there have been a few studies that were able to replicate Durkheim's finding (Goss and Reed, 1971; Breault, 1986). Pescosolido and Georgianna (1989) have found that Catholicism does exert a protective influence but many Protestant denominations do also. The majority of the research has shown no difference between the various denominations with respect to suicide (Pope and Danigelis, 1981; Bankston et al., 1983; Stack, 1983a; Stark et al., 1983). The major reason for these findings seems to be the liberalization of the Catholic Church. There is great conflict within the church over important issues such as birth control, and the number of clergy has declined to a point where there is now a shortage and the result seems to be a decline in Church attendance (Stack, 1981b). The emphasis has shifted from religious denominations to the importance of religion.

Durkheim (1951) emphasized throughout his discussion that it was the integrative aspect of religion that was most important. Catholics had lower suicide rates because they were more integrated, that is, they had closer associations. Simply because Catholics are no longer more integrated does not negate his basic idea (Pope and Danigelis, 1981; Bankston et al., 1983; Stark et al., 1983; Breault, 1986; Pescosolido and Georgianna, 1989). One possible way to study this integrative aspect is through the use of network theory.

Pescosolido and Georgianna (1989) argue that by using a network approach, a clearer understanding of the relationship between religion and suicide results. They believe that it is the ties with other members in the church that provides the greatest protection, not membership per se (Trovato and Jarvis, 1986). The network approach also allows a conceptual distinction between integration and regulation.

> One potential function of social networks is integration or the ability to provide social and emotional support. Another is regulation, guiding action through advice and behavior monitoring (Pescosolido and Georgianna, 1989:43).

They argue that when one aspect outbalances the other, the potential for suicide is increased. When an individual is subject to strong religious regulative authority, but are prevented from establishing integrative ties to individuals outside the network, the probability of fatalistic suicide is high (Pescosolido and Georgianna, 1989).

It is the density of network ties that is most important. They indicate this in graphic form, plotting the potential suicide rate by various religious groups based on the density of ties. The figure shows that both cult members and atheists hold the highest suicide potential, with other groups somewhere in between. Cult members have the highest density of ties, they are less subject to egoistic suicide but more subject to fatalistic suicide (eg. Jonestown) while the atheists have the lowest density of ties and are subject to higher rates of egoistic suicide.

In this analysis, those with few ties or the religiously unaffiliated are chosen for study. People answering "no religion" to the question "What is Your Religion?" in the Census is the chosen variable. These people are not necessarily less religious but it is anticipated that they are less well integrated into a religious group than those who have a preference. Veevers and Cousineau (1980) have analyzed this group with respect to some demographic variables for Canada using 1971 Census data. The relationship between no religion and age is curvilinear, with teenagers and people over 30 showing the lowest percentage. More males report having no religion than females and these rates are higher in central metropolitan centers than in rural areas. Gee and Veevers (1989) repeat this analysis using 1981 Census data. While the percentage of people stating no religion has increased, the above stated patterns of relationships remain true.

Another relationship that exists in both 1971 and 1981 is an East-West gradient, that is, the percentage of persons reporting no religion increases from Newfoundland until it reaches a high in British Columbia. The exact reasons for this trend are not clear and are not explicated by the authors. From the point of view of this thesis, it leads to an expectation that suicide rates would follow the same pattern.

Hypothesis 1: Provinces with a greater percentage of people stating no religion will have higher suicide rates due to their low level of integration in religious society.

The second dimension that will be analyzed here is that of domestic integration. Two specific aspects of this dimension are emphasized: one coming from Durkheim's theory the other from more recent research. Durkheim (1951) used anomic suicide to describe the suicide of divorced people, it was the loss of marital regulation that led these individuals to suicide. He however, discussed family integration in terms of egoistic suicide, family size accounted for the lower rates of suicide among married individuals. Divorce causes a decrease in family size and less interaction among members and thus, suicides of divorced individuals could be seen as resulting from a decrease in marital

integration. The regulative aspect of Durkheim's argument, states that the divorced person's roles are no longer clearly defined, they no longer have the guiding influence of familial norms. Thus, suicides of divorced individuals can be seen as both anomic and egoistic.

Almost all of the research done in this area makes no attempt to distinguish between the two types of suicide, the reason for this is clear, it is almost impossible to empirically separate the two (Danigelis and Pope, 1979). This analysis will be no different, it is only possible to say that divorced individuals have higher rates of suicide; whether it is due to anomic or egoistic suicide cannot be determined. One possible explanation is that as divorce becomes more common, in the context of family change, the anomie associated with being divorced has declined, and this will be checked for in the analysis.

The relationship between divorce and suicide is strong and positive. Most studies of suicide using the divorce variable, have found this relationship (Stack, 1980b, 1981a, 1985; Trovato, 1986b, 1987; Conklin and Simpson, 1987). Explanations are offered on two levels. On the societal level, social change and a rise in individualism have been suggested as possible reasons for the increase in divorce rates (Stack, 1985); a society with high divorce rates is low in social integration. As a result, there are many people who have no bonds to the family and the resulting normative confusion increases their chances of suicide (Stack, 1980b). Societies that experience lower levels of social integration experience increased suicide rates (Trovato, 1986b).

Individual level explanations point toward the specific results divorce has on the individual. A divorcee loses responsibilities to his/her spouse/children (Stack, 1981a), he/she also loses a sexual partner and thus increases in sexual tension are common (Stack, 1985). Durkheim (1951) stated that the rate of suicide among the divorced is greater for men than women and this has been shown, to some extent, in the literature (Lester, 1986). The female is often the custodial parent and thus the male loses the majority of the ties.

Hypothesis 2: Provinces with a higher rate of divorce will have higher rates of suicide.

The second aspect of domestic integration that will be considered is married female labor force participation. The increase in working married women has been one of the major demographic trends in recent years (Newman et al., 1973). The influence of female labor force participation on the suicide rate has gained considerable attention in the literature, with two different theoretical perspectives developing.

Gibbs and Martin (1964) used married female labor force participation as the primary example of status incompatibility: the role conflict between mother and worker would cause an increased rate of suicide. Some of the research has supported this relationship (Miley and Micklin, 1972; Newman et al., 1973; Stack, 1978, 1985; Conklin and Simpson, 1987), while other research has shown that working married women actually have lower suicide rates (Cumming et al., 1975; Davis, 1981; Ornstein; 1983; Trovato, 1987). Additionally, recent research has shown that males may have higher rates of suicide as a result of married female labor force participation (Newman et al., 1973; Stack, 1985, 1987; Trovato, 1987).

Role accumulation theory can be used to explain the negative results obtained using status integration. Research on the roles men and women hold in society show that men whose wives work are subject to greater stress and they have greater difficulty coping (Burke and Weir, 1976). The literature also states that each role brings direct and indirect benefits. Female labor force participation provides both economic and affiliating benefits. These bonds decrease the isolation of women, increase their level of social interaction (Stack, 1987), which in turn decreases their rates of suicide. Until more research is done, it is expected that increased rates of married female labor force participation will be associated with higher rates of suicide.

Hypothesis 3: Provinces with a higher rate of married female labor force participation will have higher rates of suicide.

The third dimension of social integration considered here is economic anomie. Durkheim (1951), argued that any change in the social order would produce higher suicide rates. Both economic booms and recessions upset the social order and lead to increased suicide rates. Research done since Durkheim has focused on unemployment as a measure of economic anomie. Theoretically, the reasoning is that loss of employment may produce disruption of social roles, relationships and contingencies for the unemployed and for others in society also (Boor, 1980).

On the societal level, times of high unemployment are associated with higher suicide rates (Platt, 1984). Some research has shown that only an increase in unemployment produce higher suicide rates (Stack, 1981a;.South, 1984) while other research shows that " the greater the duration of unemployment the greater the suicide rate" (Stack and Haas, 1984:24). In his review of the unemployment literature Platt (1984) indicates that in general, aggregate longitudinal analysis indicates a significant positive association between unemployment and suicide but, cross-sectional studies have generally provided no consistent relationship between the two (Platt, 1984). Boor (1980) found that in Canada, increasing unemployment rates were correlated with increasing suicide rates among young people. At this level, it is only possible to show a link between times of high unemployment and high suicide rates. More research is needed in order to show whether both constant high levels and increased levels are associated with rising suicide rates.

Individual level research shows that suicides are more frequent among the unemployed than would be expected in the general population (Platt, 1984). Reasons given for the higher rates include lower rates of self esteem, higher rates of marital tension, more stress and a tendency for the unemployed to retreat from social relationships (Stack, 1983a; Stack and Haas, 1984; Trovato, 1987). Those with well developed social networks and financial cushions tend to commit suicide less. The currently employed are also affected by times of high unemployment, they fear losing their jobs and also tend to experience a decline

in real wages (Stack, 1983a; Stack and Haas, 1984). Brenner (as cited in Stack and Haas, 1984) found that times of high unemployment result in more deaths due to stress.

Hypothesis 4: Provinces with higher rates of unemployment will have higher rates of suicide.

The last dimension of social integration to be considered here is mobility. Durkheim (1951) never discussed a relationship between migration and suicide, but recent research has determined that migration can serve as an index for social integration. Stark et al. (1983) argue that areas characterized by high population turnover are less integrated than those with relatively stable members. They believe that metropolitan migration can serve as a good measure of the density and intensity of interpersonal ties that is characteristic of high social integration. Other research has supported the measure. For example, South (1987) says that rapid in- and out-migration weakens the bonds that tie individuals to society. At this level, it is the lack of social integration in the community that tends to produce higher rates of suicide.

The individual level shows that people who migrate break bonds to family, friends, churches and schools (Stack, 1982b; Breault, 1986) and that as distance increases between the migrant and his significant others, the greater the chances of the migrant committing suicide. The major reason seems to be the decrease in social integration experienced by the migrant (Trovato and Jarvis, 1986). The variable chosen for the analysis is intra-provincial migration.

Hypothesis 5: Provinces with high rates of intra-provincial migration will have higher rates of suicide.

The above discussion has outlined the theoretical framework that will be used in this analysis and the five hypotheses. Two other important variables need to be introduced into the discussion, variations in the suicide rate by age and sex.

Regarding sex differences in suicide, research today looks at sex roles to explain the differentials in the suicide rates. Wilson (1981) argues that because the female role is wider and does not have a set standard for success or failure, they are less at risk from suicide. She argues that it is the diffuseness vs narrowness of the role and presence or absence of standards for gauging performance, may be the key to understanding difference in rates of completed suicides (Wilson, 1981). Nathanson (1984:210) concludes

> It is altogether possible that sex differences in patterns of socialization and in the normative and structural constraints associated with their respective positions in society cause men and women to respond quite differently to potentially "risky" or "stressful" situations, in part because these situations, have different meanings for men and women.

Gove (1972) noted that if role analysis is correct, women's rates should steadily increase over time, and he found this to be the case. Other research has shown that female suicide rates did increase during the 1960's but became quite stable in the 1970's (Steffensmeier, 1984). The rise is attributed to greater role strain caused by increased rates of female labor force participation and the stabilization as a result of society's acceptance of women's new roles.

The explanation seems to be that sex role differences between men and women cause their different rates of suicide. As women's role in society becomes more complex, an increased rate of suicide would be expected. Role accumulation theory however, indicates that women actually benefit from their new roles and it is the men who suffer. Whether the situation changes will only be shown by future research.

The relationship between age and suicide has changed over time. Early research showed that suicide rates increased steadily into old age and explanations for this trend focused on higher rates of depression and lower rates of social integration. Retirement, death of a spouse and physical illness all decrease ties with society (Stack, 1980b). Stack (1982a:133) found that "a one percent increase in the aged population was associated with a

.72 percent increase in the suicide rate". Cohort analysis has shown an increase in suicide throughout old age. Ahlburg and Schapiro (1984:103) predict

> declining suicide rates for all females and for younger males throughout the 1980's. However, for males over 45 years of age, suicide rates are forecast to rise. These forecasts are expected to hold for the 1990's.

It is the worsening relative economic position that will lead to a reversal of the decline in suicide rates of this age group.

There is some evidence that the suicide rate among the elderly is decreasing. Stack (1980b) failed to find a significant relationship between elderly population and the suicide rate and Steffensmeier (1984) has found evidence that suicide rates among white males over 40 have fallen. The explanation given for the decline is the improved health condition of the elderly and improved financial situation. Attitudes toward retirement have also changed dramatically over the last twenty years.

> Retirement attitudes are becoming more favorable, and the view of retirement changed from that of a position forced by declining health and job discrimination to that of a reward for years of contributing to the economy (Steffensmeier, 1984:625-626).

This latter view seems to express some of the values that are held in society today and it more realistically reflects the condition of the aged. Given these changes it is expected that suicide among the elderly will decline.

No hypotheses will be generated for age and sex but they will be introduced in the analysis as controls. The operationalization of all the variables will be discussed in the next chapter.

Chapter 3: Data and Methodology

This chapter will discuss the operationalization of the variables used to test the five hypotheses introduced in the previous chapter and the data and methods used for the analysis.

The suicide data for this study were extracted from official sources and thus a brief discussion of the problems associated with this type of data follows. There are three types of errors associated with official suicide statistics, random error, uniform misreporting and systematic misreporting. The first and second types do not prevent tests of sociological theories, but they do lead to questions about the real magnitude of rates in the population (Pescosolido and Mendelsohn, 1986). The last type, systematic misreporting, biases the suicide rate because the ratio of true to official rates is consistently correlated with observable characteristics (Pescosolido and Mendelsohn, 1986). A highly religious area may report fewer suicides due to their beliefs than an area that is not as religious. The same may be true for a Medical Examiner of the Catholic faith who may report more suicides as accidents than is actually the case (Jarvis et. al., 1990). Systematic misreporting causes the concern for using official suicide data to test sociological theories. There are however, very few, if any, alternative data sources and thus the important question should focus on the reliability rather than absolute level of the suicide statistics. Pescosolido and Mendelsohn (1986:94) found that despite the underreporting of suicides, it made little difference in "unraveling the fundamental causes of suicide in the United States." The position adopted in this paper is similar to these authors: while official rates of suicide may be underestimates of true rates, this fact should not prevent an accurate test of theory.

3.1: Operationalization and Data Sources

The age groupings used for this analysis are in five years beginning with 15-19. However, the final age group is 55 plus because the divorce data available was coded from 15-19 up to 55 plus. Thus, the data had to be classified consistently and uniformly on the basis of the divorce variable.

Data for the dependent variable, suicide, were taken from *Suicide in Canada* (National Task Force on Suicide, 1987). Three year averages around the census year will be examined (1970-72 and 1980-82) and all rates are age, sex and province specific. The original data set contained rates for ages beyond 55 but these had to be collapsed into a, 55 plus category to make it consistent with the divorce age classification[2]. The dependent variable is thus defined as the number of suicides divided by the age-sex specific populations expressed per 100,000.

The data needed to test hypothesis 1 dealing with religious individualism comes from the published census volumes for 1971 and 1981 (Statistics Canada, 1974a, 1984). This variable is expressed as a percentage of all people stating no religious preference of the age-sex specific population in each province. The original data set did not employ five year age groupings consistently. The data were in five year groups from age 15 to 24 but in ten year intervals for the remaining age groupings. Graphic interpolations was used to break down the necessary data by five year age groups. The percentages were plotted on the y-axis, and the age groups on the x-axis. Three exact data points were plotted for 15-19, 20-24 and 55 plus, the remaining data points were plotted in the middle of the ten year groups and a line was drawn to connect the data points. The percentages for five year age groups

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[2] Each rate for age groups 55-59, 60-64, 65-69 and 70 plus were first divided by 100,000 and then multiplied by their respective age-sex specific populations. The result is the actual number of suicides in each age group which were then summed and divided by the sex specific population 55 plus, this result was multiplied by 100,000 to produce the new rate. This calculation was done for each sex, province and year.

25-29, 30-34, 35-39, 40-44, 45-49, 50-54 were obtained by reading up from the x-axis to the line and over to the appropriate percentages on the y-axis.

The data used to test the first dimension of domestic integration, divorce, comes from two different sources. The 1971 rates were not available from published sources and thus they were obtained directly from the Director of Vital Statistics and Disease Registry in Ottawa. The 1981 rates were extracted from the published Vital Statistics Volume for that year (Statistics Canada, 1983). The divorce rates are age-sex specific and defined as the number of divorces per 100,000 age-sex provincial population. This variable will allow for a determination of how divorce effects suicide in Canada.

The data used for the second dimension of domestic integration, married female labor force participation, comes from the 1971 and 1981 Public Use Sample Tapes. It is defined as the percentage of married females in the labor force and is age-sex-province specific. While more refined measures are desirable it was felt that using this particular definition would allow for an adequate test of how married female labor force participation effects suicide.

The economic anomie dimension is tested using data from the 1971 and 1981 Public Use Sample Tapes. The unemployment measure is expressed as the ratio of the number of persons unemployed over those in the labour force, and it is age-sex-province specific. This variable will allow for a test of economic anomie's effect on suicide.

Data for migration were also derived from the 1971 and 1981 Public Use Sample Tapes. Intra-provincial migration is defined as the percentage of people who made an intra-provincial move between 1966-71 and 1976-81 respectively. This variable is used because of its association with the state of anomie experienced by individuals who move.

All the above data can be found in Tables A1-A14 in Appendix A. The data were coded and entered into a file to be analyzed using the computing package SPSSx. Dummy codes of 0 and 1 were assigned to the years 1971 and 1981 respectively and also to males and females respectively. The age groups were assigned values of 1 to 9 (1=15-19, 2=20-

24, 3=25-29, 4=30-34, 5=35-39, 6=40-44, 7=45-49, 8=50-54, and 9=55 plus) as were the provinces (1=Newfoundland, 2=Nova Scotia, 3=New Brunswick, 4=Quebec, 5=Ontario, 6=Manitoba, 7=Saskatchewan, 8=Alberta, and 9=British Columbia). The remaining data were entered as percentages or ratios where appropriate, to one decimal place.

A number of preliminary regression analyses were executed, and on the basis of the findings, a few changes had to be introduced to the methodology, which are discussed below.

3.2: Methodology for Preliminary Regression Analysis.

In this section the provinces were recoded into dummy variables with British Columbia as the reference category. While any of the provinces could have been chosen as the reference category, B.C. was used because its high rate of suicide would make interpretation for the other variables slightly easier. Variable P1 represents Newfoundland, P2 Nova Scotia, P3 New Brunswick, P4 Quebec, P5 Ontario, P6 Manitoba, P7 Saskatchewan and P8 Alberta. The age variable was also recoded into dummy variables using 55 plus as the reference category. Variable A1 represents 15-19, A2 20-24, A3 25-29, A4 30-34, A5 35-39, A6 40-44, A7 45-49 and A8 represents 50-54.

Two separate equations were computed for this section, one using just the age and sex dummy variables and the second using these and the independent variables discussed earlier, as well as time. This procedure allows for a differentiation of the variance explained by age and sex from that explained by the other variables.

The correlation matrix for the variables used in this section can be found in Table 1. The matrix shows that collinearity may not be a problem in the preliminary regression analysis. There are a few coefficients that need to be discussed, however. The first is the correlation between sex and the three year suicide average (r=-.801). This coefficient is

reflecting the fact that males commit suicide more than females, its high value however, may cause problems of collinearity. Most of the independent variables correlate positively with the dependent variable. The two exceptions are unemployment (Unemp) and mobility which correlate negatively with suicide. This indicates that higher rates of unemployment are associated with lower rates of suicide.

3.3: Methodology for Hypotheses Testing

The methodology discussed in the above section could not be used to test the hypotheses presented in Chapter 2. Two major problems were encountered, namely, heteroskedasticity and an S-shaped probability plot. The methodology used to remedy these problems will be presented after the changes made to the variables are discussed.

The provincial dummy variables are recoded into regions. The provinces of Newfoundland, Nova Scotia and New Brunswick are grouped into one region called Atlantic. These three provinces have the lowest rate of suicide in both 1971 and 1981 and thus are similar enough to group together. The provinces of Quebec and Ontario are left as individual regions because of their dominance in population, economy and influence in Canadian society. Manitoba and Saskatchewan have very similar suicide rates and are grouped together into one region called ManSask. Alberta is left as a single region due to its variation in a number of sociodemographic factors, such as its higher suicide rate and migration experience, from the other Prairie provinces. British Columbia is again used as the reference category in order to execute the regression analyses.

The age dummy variables are regrouped. The 15-19 year age group was left by itself since they have the lowest rates of suicide for both 1971 and 1981. The age groups 20-24 and 25-29 are combined into one ten year age group, 20-29, as these groups have similar suicide rates. The next four age groups are combined into a twenty year age group, 30-49, as these ages in general, have comparable suicide rates that are higher than the other

ages. The final age group becomes 50 plus rather than 55 plus since the group 50-54 have suicide rates fairly similar to those aged 55 plus. This last age group will be used as the reference category.

The problem of heteroskedasticity found in the regressions was dealt with by using a weighting procedure. Each observation, including the constant term, was weighted by the square root of the age-sex population in each province. The last problem presented itself in the probability plot of observed vs expected residuals, the relationship was found to be S-shaped rather than linear. The three year average suicide rate was thus transformed to its logit. This new transformed variable will be used for the rest of the analysis. Thus, the regression equation is of the form:

$$\ln\left(\frac{SR}{1-SR}\right) = \alpha + \beta_1 X_1 + \ldots + \beta_n X_n + e$$

where SR=The suicide rate as a decimal,
ln=Natural logarithm, α is the intercept, and β represents parameter values for the effect of predictor variables in the analysis.

The correlation matrix for the variables used in this section can be found in Table 2.

Chapter 4: Data Analysis

In Chapters 2 and 3 I have discussed the theory, hypotheses and methodology that guide the data analysis. This chapter consists of the results from the multivariate analysis. The provincial variations in each of the variables will be analyzed first followed by the results from the hypotheses testing.

4.1: Chart Analysis: Provincial Variations

Chart 1 shows the male suicide rates for all age groups combined for 1971 and 1981. Over time, each province has experienced increases in suicide. The rates for Ontario, Manitoba and British Columbia increased only slightly by 1.1 per 100,000 (Ontario), .8 per 100,000 (Manitoba) and .7 per 100,000 (British Columbia) respectively. Most of the other provinces show marked increases in the suicide rate. The female rates, depicted in Chart 2, present a much different picture when compared to the males. Newfoundland, Ontario, Manitoba and British Columbia show declines of .5, .2, 1.6, .3 and 3.7 per 100,000 respectively. The four remaining provinces experienced increases in their suicide rates, with Nova Scotia showing the smallest increase at .5 per 100,000. Quebec's rate increased by 2.8, Saskatchewan's by 2.2 and Alberta's by 2.0 per 100,000. The female suicide rates are still substantially below the male rate, and in the majority of the provinces female rates are decreasing faster than those of males.

The general trend of increasing suicide rates from east to west is evident for both males and females but shows up clearer in 1971 for males. The trend seems to break apart in 1981 for both sexes indicating that the generalization may no longer be true for Canada. This is more apparent in Chart 3 which depicts the total suicide rates for 1971 and 1981. Only Ontario and British Columbia show declines in their suicide rates ,by .3 and 1.6 per 100,000 respectively. This corresponds to the two provinces that experienced the greatest

decline for females in 1981 and the smallest increases for males in 1981, indicating that the declining female rate was instrumental in pulling down the overall suicide rate in these provinces. One of the most interesting features in Chart 3 is the performance of British Columbia, which had the highest rate of suicide in 1971 but only the fourth highest in 1981. This gives further contradictory evidence to the previously held idea of increasing suicide rates from eastern to western Canada.

Table 3 shows the regression coefficients for the effects of time and provincial dummy variables on the three-year suicide average. Time is included so that the difference, if any, in the suicide rates, between the two time points, may be determined. The suicide rate increased over time but the change was not significant. All of the provincial dummy variables have suicide rates below those of British Columbia (which is the reference category) but only Newfoundland, Nova Scotia and New Brunswick have rates significantly below British Columbia's. These results confirm the findings in the charts presented above. Tables 4 and 5 present the results of the above regression when it is divided into the two time points. In 1971, all of the provincial dummy variables have suicide rates below British Columbia's, however only Newfoundland, Nova Scotia, New Brunswick and Quebec have rates significantly below. The results for 1981 are quite different with Alberta, Saskatchewan and Quebec all having suicide rates above British Columbia's . The remaining provinces have rates below British Columbia, with Newfoundland having a significantly lower rate.

The above section has focused on the provincial variations in suicide rates, the discussion now turns to provincial variations in the independent variables. Charts 4 and 5 show the total suicide rates and percent no religion for 1971 and 1981 respectively. Recalling hypothesis 1, it was anticipated that provinces with higher percentages of people stating no religion would also have higher suicide rates. In general, the charts show this to be the case. In most of the provinces both percent no religion and suicide increased over time. Thus, looking at changes over time is an alternative way to view the relationship

between percent no religion and suicide. Also, as one moves from east to west in Canada the relationship suggested in the hypothesis is shown. In 1971, both suicide and percent no religion tend to show an increasing pattern, suggesting that in general, the higher a province's percent no religion, the higher the rate of suicide. The proportion with no religion is highest in British Columbia and Alberta and is lowest in Quebec and the Atlantic Provinces. Suicide is highest in British Columbia and lowest in Newfoundland.

Chart 5 shows the 1981 total percent no religion and suicide rates. The general pattern is similar to that noted for 1971, but the east-west trend across provinces is less distinct. The percentage of people stating no religion is again the lowest in Newfoundland and the highest in British Columbia. Using both of the above methods, that is, change over time and difference among provinces, the hypothesized relationship between percent no religion and suicide seems to hold. (Charts A1 to A4 in Appendix A show the male and female components to these graphs, as well Tables A21 to A23 present the regression results for the effects of provincial dummy variables on percent no religion for both time points combined and then for 1971 and 1981 separately.)

Charts 6 and 7 show the provincial variations in the total suicide and divorce rates for 1971 and 1981 respectively. Hypothesis 2 states that the higher the provincial divorce rate, the higher the provincial suicide rate. In general, this association is apparent for 1971 and 1981. Both rates are low for Newfoundland and tend to increase as one moves westward, although not perfectly in a linear fashion. For example, New Brunswick and Saskatchewan deviate from the general pattern. When looking at change over time one sees that, in general, both the divorce and suicide rates increased which gives further support to hypothesis 2. Chart 7 shows the relationship between the total divorce and suicide rates for 1981. Despite some variations, the hypothesized relationship seems to hold overall. (Charts A5 to A8 in Appendix A show the male and female components to these graphs , as well Tables A24 to A26 present the regression results for the effects of the provincial

dummy variables on the divorce rate for both time points combined and then for 1971 and 1981 separately.)

Charts 8 and 9 depict the provincial variations in married female labor force participation (Mflfp) and the female suicide rate for 1971 and 1981 respectively. Hypothesis 3 indicated that the relationship between these two variables should be positive; that is, the higher the rate of Mflfp the higher the rate of suicide. Chart 8 shows that, in general, this is the case for 1971 and 1981, but the relationship seems stronger for 1981. Both married female labor force participation and suicide increased between 1971 and 1981 which indicates that the hypothesis is generally supported using both types of analysis. (Charts A9 and A12 in Appendix A show the male and total components to these charts, as well Tables A27 to A29 present the regression results for the effects of the provincial dummy variables on Mflfp for both points in time combined and then for 1971 and 1981 separately.)

Charts 10 and 11 show the provincial variations in the total unemployment and suicide rates for 1971 and 1981 respectively. There is an obvious dichotomy, in that provinces with higher rates of unemployment have lower rates of suicide and provinces with lower levels of unemployment have higher suicide rates. Three of the four provinces that have higher rates of unemployment are in the Atlantic region which, historically, have always had high rates and it is possible that these provinces have adjusted to the high level and it is no longer a cause of anomie among them. These provinces have among the lowest rates of the other social disintegration variables used here, it is not improbable that high unemployment rates would not cause higher suicide rates because they have other areas of their life still intact. However, when the change between 1971 and 1981 is looked at, one sees that both the unemployment and suicide rates have increased over time. This would indicate that in spite of the dichotomy, hypothesis 4 is supported by the two charts. (Charts A13 to A16 in Appendix A show the male and female components to these charts, as well Tables A30 to A32 present the regression results when the provincial dummy

variables are regressed on the unemployment rate for both points in time combined and for 1971 and 1981 separately.)

Charts 12 and 13 show the provincial variations in total intra-provincial mobility and suicide for 1971 and 1981, respectively. Hypothesis 5 suggests that higher rates of mobility would be associated with higher rates of suicide. When looking at the charts separately it would appear that the hypothesized relationship is upheld, because, in general, provinces with higher rates of intra-provincial mobility also have higher suicide rates. However, when looked at as change over time a different picture emerges. Mobility rates have declined in 1981 but suicide rates have continued to increase. This seems to suggest that an inverse relationship exists between these variables. One possible explanation is that as unemployment increases there is a tendency to stay in one place and ride out the difficulties. Table 2 shows a small negative correlation between unemployment and mobility which offers some support for the suggestion. Once the results of the multivariate analysis have been presented, a clearer picture of this relationship may emerge. (Charts A17 to A20 in Appendix A show the male and female components to these charts, as well Tables A33 to A35 show the regression results for the effects of the provincial dummy variables on the intra-provincial mobility rate for both time points combined and 1971 and 1981 separately.)

In its entirety, the above discussion has been useful in identifying overall univariate relationships in suicide and the independent variables. It has also shown the usefulness of looking at both the overall trends within each year as well as change over time. As in the cases of unemployment and mobility different pictures emerge with both types of analysis. This will be beneficial in understanding the regression results that will be presented in the next section.

4.2: Preliminary Regression Analysis

Table 6 shows the preliminary regression coefficients for the effects of age, sex and time dummy variables as well as the other independent variables, percent no religion (Norelig), unemployment rate (Unemploy), divorce, married female labor force participation (Mflfp) and percent intra-provincial mobility (mobility) on the suicide rate. As indicated in Chapter 3 two different equations were computed: one using the age and sex dummy variables only, and the second including age, sex as well as the social integration variables and time.

Table 6 indicates that the age and sex dummy variables explain approximately 66% of the variance in the suicide rate, leaving only 8% being explained by time and the independent variables, for a total of approximately 74%. From the slopes we see that sex is negative and significant indicating that females seems to commit suicide at a lower rate than males. The standardized Beta coefficient indicates that sex has the largest effect on the suicide rate holding all of the other variables constant. The age dummy variables show that all of the age groups have suicide rates below the reference group 55 +. Except for the age group 50-54, the rates are significantly below the reference group. The slope for time indicates that the suicide rate has declined slightly since 1971, but the decline was not significant. Chart 3, above however showed that, in general, the suicide rate had increased over the time period; this leads to the expectation that there may be some interaction between the other variables and time which produces this net effect. The no religion variable is positive and significant which supports hypothesis 1. The unemployment variable has a negative insignificant effect on the suicide rate.

The divorce variable is positive but insignificant which indicates that hypothesis 2 is supported but overall the divorce rate does not significantly influence the suicide rate. Married female labor force participation has a positive and significant effect on the suicide rate, supporting hypothesis 3. It is not yet possible to determine what effect this variable

has on the female and male suicide rates independently but this will be discused later. Percent intra-provincial mobility has a positive and significant effect on the suicide rate. The analysis of Table 6 has been intentionally brief. The discussion now turns to the results of the hypotheses tests.

4.3: Hypotheses Testing

The following analysis will present a series of five tables for each age partition. The first will show the regional variations in the transformed suicide variable. The second will present the correlation matrix for all the variables used in the analysis. The third will show the effects of the social integration variables on the transformed suicide variable. The sex variable will then be added to the equation and these results are presented in the fourth table. The final table in each series will combine all the significant regional variables and remaining variables from the above tables.

4.3a: Analysis of age group 15-19

Tables 7 and 8 present the regression coefficients of the regional variables for the 1971 and 1981 suicide rate of 15-19 year olds. Table 7 shows that 15-19 year olds in Alberta had the highest rate of suicide and those in the Atlantic region had the lowest. The region ManSask (Manitoba and Saskatchewan) had a rate of suicide higher than British Columbia but the difference is insignificant. Quebec and Ontario have suicide rates that are lower than British Columbia but only Quebec's rate is significantly lower. Table 8 shows that in 1981 the regional variations are quite different. Both Alberta and ManSask have suicide rates above British Columbia with ManSask having the highest rate of suicide. The remaining regions all have rates of suicide below British Columbia. The Atlantic region

has the lowest rate of suicide and it is the only region of the three that has a rate significantly lower than British Columbia.

Tables 9 and 10 show the correlation matrix for the analysis of 15-19 year olds in 1971 and 1981 respectively. In Table 9 there are a few correlation coefficients that are moderately strong. The positive correlation (r=.530) between mobility and divorce indicates that provinces with higher rates of intra-provincial mobility may also have higher rates of divorce. There is also a positive correlation (r=.535) between sex and divorce which indicates that the female population may have higher rates of divorce among 15-19 year olds than males. (The actual number of divorces for men and women are identical but the variation is due to the denominator.) The correlation between Alberta and divorce (r=.602) indicates that Alberta has a high rate of divorce. Ontario has a high rate of married female labor force participation (r=.632). The Atlantic region has a low mobility rate (r=-.655) for 15-19 year olds in 1971. Intra-provincial mobility is higher for females than males (r=.548) in the 15-19 year age group. The province of Quebec has a high rate of unemployment (r=.776) among 15-19 year olds in 1971 and the region of ManSask has a low rate of unemployment (r=-.518). The logit of the suicide rate correlates highly with sex (r=-.718) indicating that females tend to have lower rates of suicide than males.

Table 10 shows the correlation matrix for 15-19 year olds in 1981. There is a moderately strong positive correlation (r=.655) between intra-provincial mobility and percent no religion indicating that provinces with higher rates of intra-provincial mobility also seem to have higher rates of no religion. There is an inverse correlation (r=-.683) between unemployment and no religion. This suggests that provinces with higher unemployment rates also have lower percentages of people stating no religion. The Atlantic provinces have the highest rates of unemployment (r=.706) and a low percentage of no religion. The correlations between divorce and mobility as well as between sex and divorce remain as they were in Table 9. There is also an inverse correlation (r=-.694) between unemployment and mobility. This may suggest that 15-19 year olds who had higher

unemployment rates could not afford to relocate to find new employment and thus had lower mobility rates. The chart analysis in the previous section suggested that this was a possible result. The Atlantic region had the lowest rate (r=-.650) of married female labor force participation and the highest rate of unemployment (r=.706).

The next two tables present the regression coefficients for the effects of the social integration variables on the logit of the suicide rate for 15-19 year olds in 1971 and 1981 respectively. In Table 11, the no religion variable has a positive effect on the suicide rate which supports hypothesis 1. Provinces in which 15-19 year olds have higher rates of no religion seem also to have higher suicide rates. The divorce variable has a negative insignificant effect on the suicide rate for this age group in 1971 and this does not support hypothesis 2. This would seem to indicate that divorce among young people is viewed as an escape from a bad marital situation and thus may not be a cause of increased suicide. Married female labor force participation has a positive significant effect on the suicide rate which supports hypothesis 3. This indicates that higher rates of Mflfp may increase the suicide rate for this age group in 1971. The unemployment variable has a positive but insignificant effect on the suicide rate. The mobility variable has a negative significant effect on the suicide rate for 15-19 year olds in 1971. This is contrary to hypothesis 5 and indicates that higher rates of intra-provincial mobility are associated with lower suicide rates. The social integration variables explain approximately 28% of the variance in the logit of the suicide rate for 15-19 year olds in 1971.

Table 12 presents the results for the effects of the social integration variables on the 1981 logit of the suicide rate for 15-19 year olds. The no religion variable retains its positive effect on the suicide rate but it is insignificant. Higher percentages of no religion among this age group are associated with higher suicide rates. The divorce variable has a negative significant effect in 1981. Married female labor force participation continues to show a positive effect on the suicide rate among 15-19 year olds in 1981. The unemployment variable has a negative significant effect on the suicide rate of 15-19 year

olds in 1981. This is contrary to hypothesis 4, since it indicates that provinces in which 15-19 year olds had higher unemployment rates also had lower suicide rates. Intra-provincial mobility retains its negative effect on the 1981 suicide rate for 15-19 year olds. The social integration variables explain approximately 35% of the variance in the logit of the 1981 suicide rate for 15-19 year olds. Comparing the amount of explained variance in 1971 and 1981, we see that despite fewer hypotheses being supported in 1981, more of the variance is explained. This suggests that the social integration variables capture the situation better in 1981 than in 1971, which indicates that some of the hypotheses may need to be changed in future analysis.

Table 13 and 14 present the regression results when sex is added to the equation for 1971 and 1981 respectively. Table 13 shows that there is a problem of collinearity with this equation due to the high Beta coefficient of sex (Beta=-1.003547). The sex variable correlated moderately with two other independent variables, divorce and mobility, and highly with the dependent variable. None of the correlations were unexplainable but they are causing a problem in this equation. The sex variable has a negative significant effect on the 1971 suicide rate for 15-19 year olds which indicates that females have lower rates of suicide than males. The amount of explained variance has increased to approximately 74%, which means that the sex variable itself explains 46% of the variance, in the 1971 suicide rate for 15-19 year olds. This value may be inflated due to the high Beta coefficient.

Table 14 shows the results when sex is added to the equation for 1981. The no religion variable is positive and significant which supports hypothesis 1. The divorce variable has a positive significant effect on the suicide rate for 15-19 year olds. Married female labor force participation variable has not changed, it retains its positive significant effect on the suicide rate for 15-19 year olds. The unemployment variable retains its negative significant effect on the suicide rate and this seems to indicate that for 15-19 year olds higher rates of unemployment are associated with lower suicide rates. The intra-provincial mobility variable retains its negative significant effect on the suicide rate. The

sex variable in 1981 indicates that females have a lower rate of suicide than males. This variable explains less of the total explained variance than in 1971. In Table 14 the total explained variance is 58% of which 23% is explained by the sex variable.

Tables 15 and 16 show the final equations for 15-19 year olds in 1971 and 1981, the significant regional variables from Tables 7 and 8 are added to the equations. Table 15 presents these results for 1971 and shows that most of the social integration variables support the hypotheses. For 15-19 year olds in 1971 higher rates of no religion, divorce and married female labor force participation are associated with significantly higher suicide rates. The unemployment variable has a positive but insignificant effect on the suicide rate of 15-19 year olds. The mobility variable has a negative significant effect on the suicide rate. One possible explanation is that at this age moving away from home reduces their chance of suicide. This is a time when young people feel that they need to be alone and living under their parents roof may serve to increase their feeling of disintegration and thus increase their chance of suicide. The sex variable retains its negative effect on the suicide rate.

The three regional variables that were significant are entered into the equation and they remain significant. 15-19 year olds living in the Atlantic region have significantly lower rates of suicide compared to British Columbia, whereas those living in Quebec and Alberta have significantly higher rates of suicide. The regional variable contribute approximately 12% to the total explained variance of 86%.

Table 16 presents the results for 1981 and they are virtually identical to those in 1971. The variables no religion, divorce and Mflfp are each associated with increases in the suicide rate for 15-19 year olds in 1981. The unemployment variable has a positive but insignificant effect on the suicide rate. The mobility variable has a negative effect on the suicide rate. The sex variable shows again that females have a lower suicide rate than males for 15-19 year olds. For the two regional variables in the equation only ManSask has significantly higher rates of suicide when compared to British Columbia. The Atlantic

region has a higher suicide rate but not significantly higher. These two variables explain only 3% of the total 61% of the variance explained.

The series of tables discussed and presented above shows that the hypothesis set out in Chapter 2 explains the situation in 1971 for 15-19 year olds somewhat better than in 1981 as reflected by the difference in the R^2 values in the final two tables. This seems to suggest that there is something else happening in 1981 which is not captured by this model. Once all of the age groups are analyzed a better understanding of the situation in 1981 should be obtained.

4.3b: Analysis of age group 20-29

The next age group to be analyzed is 20-29 year olds in 1971 and 1981. Table 17 shows the regional variations for 1971. All of the regions have suicide rates significantly below British Columbia, with the Atlantic region having the lowest rate. 20-29 year olds living in the Atlantic region seem to have the lowest rates of suicide whereas those living in British Columbia seem to have the highest rate. The situation in 1981 is slightly different. The Atlantic region continues to show the lowest rate of suicide but the region of ManSask has the highest rate although it is not significant. Ontario is the only other province to show a suicide rate significantly below British Columbia. Alberta's suicide rate is below British Columbia but not significantly and Quebec has a rate above British Columbia but again not significantly. In 1971, the regional variables explain 13% of the variance in the suicide rate and slightly more in 1981 at 14%.

Tables 19 and 20 show the correlation matrices for 20-29 year olds in 1971 and 1981 respectively. There are no correlations that would indicate that collinearity is a problem in 1971 for 20-29 year olds. In Table 20, however, there are a few correlations that are large enough to warrant some concern. Provinces that have high rates of intra-provincial mobility also seem to have high rates of no religion (r=.589) and high rates of

unemployment are associated with lower rates of no religion (r=-.529). There is a positive correlation between mobility and divorce (r=.598) which was also obtained earlier for 15-19 year olds. There is an inverse correlation (r=-.530) between unemployment and divorce indicating that provinces high in unemployment seem to have lower divorce rates. The Atlantic region has the highest unemployment rate and one of the lower rates of divorce and these could be producing this unexpected correlation. The Atlantic region has one of the lower rates of married female labor force participation (r=-.505) and Ontario has one of the highest rates of Mflfp (r=.502). There is an inverse correlation between (r=-.649) unemployment and mobility indicating that 20-29 year olds who are unemployed seem to have lower percentages of intra-provincial moves. This points to the same idea discussed for 15-19 year olds, that when unemployment increases, people seem to stay where they are rather then move elsewhere. The province of Alberta has a high rate of intra-provincial mobility (r=.634) and as discussed above the Atlantic region has high unemployment rates (r=.615).

The next two tables present the regression results for the effects of the social integration variables on the 1971 and 1981 suicide rate for 20-29 year olds. Table 21 presents the results for 1971 and shows that all of the integration variables, with the exception of mobility, have a significantly positive effect on the suicide rate for this age group. Higher percentages of no religion are associated with higher suicide rates which supports hypothesis 1. Hypothesis 2 and 3 are supported by the results which show that higher rates of divorce and married female labor force participation are associated with higher suicide rates for 20-29 year olds in 1971. Hypothesis 4 is supported by the positive effect of unemployment on the suicide rate indicating that higher rates of unemployment are associated with higher suicide rates. The mobility variable is the only one not to support its hypothesis, it has a negative effect on the suicide rate. One possible explanation for this is that this is the age at which many individuals become married and the excitement of starting a new life may overcome the disintegrating impact of moving. A second explanation is that

offered above, that when unemployment is high people ride out the situation in an environment they are comfortable with. The social integration variables explain 16% of the variance in the suicide rate of 20-29 year olds in 1971.

Table 22 presents the regression results for 1981 and shows different results than those obtained in 1971. All of the integration variables, except no religion, have negative effects on the suicide rate of 20-29 year olds. The no religion variable continues to support hypothesis 1 with its positive significant effect on the suicide rate. The variables divorce, Mflfp and unemployment all have negative significant effects on the suicide rate. This may indicate significant shifts in the way these variables influence suicide in 1981. The mobility variable continues to show the familiar result of higher rates of Intra-provincial moving being associated with lower suicide rates. The integration variables explain 14 % of the variance in the 1981 suicide rate of 20-29 year olds.

Tables 23 and 24 present the results when sex is entered into the above two equations. The results for 1971, Table 23, show some unusual findings. For the first time the no religion variable has a negative significant effect on the suicide rate for 20-29 year olds. The mobility variable now has a positive significant effect on the suicide rate. The no religion variable may be reflecting the fact that females have lower rates of no religion than males and the mobility variable is reflecting the fact that females have higher rates of intra-provincial mobility than males. In both cases the sex variable may be conditioning the effects of these two variables. The remaining integration variables all support their respective hypotheses by having positive significant effects on the suicide rate of 20-29 year olds. The sex variable has the expected negative effect on the logit of the suicide rate. This variable explains 19% of the total (35%) variance explained.

Table 24 presents the results for 1981 when the sex variable is added and there are some interesting results. Specifically, all of the social integration variables have positive effects on the suicide rate. The no religion and unemployment variables both have positive but insignificant effects on the suicide rate for 20-29 year olds. The remaining variables,

divorce, Mflfp and mobility, have both positive and significant effects on the suicide rate. The sex variable again has a negative significant effect on the suicide rate of 20-29 year olds in 1981. This variable explains approximately 13% of the total 27% variance explained in the logit of the suicide rate.

The last tables for this age group show the final equations when the significant regional variables are added. In Table 25 the first noticeable result is the high Beta coefficients of the Atlantic (Beta=1.095098) and Quebec (Beta=1.559221) regions which indicate problems of collinearity. The correlation matrix (Table 19) gave no indication that this would be a problem. However, of all the regions these two variables correlate the highest with the social integration variables and this may be causing the problem. One way to handle this problem is to remove one of the two variables from the regression equation.

(In Tables 26 and 27 both variables were removed independently and the results are comparable. The amount of explained variance dropped the least when the Atlantic variable was removed indicating that Quebec added more to the analysis and thus it was chosen for inclusion and the Atlantic region was excluded.)

Table 27 presents the results without the Atlantic region and shows that there is one important difference. The no religion variable now has a negative significant effect on the suicide rate of 20-29 year olds in 1971. This indicates that for this age group higher rates of no religion are associated with lower suicide rates. There is no explanation for no religion's negative influence on the suicide rate for 20-29 year olds in 1971 at the moment. It is possible however, that removing the Atlantic regional variable changed the effect to negative, because no religion would be expected to have a positive effect on the logit of the suicide rate in these provinces. Once the age groups 30-49 and 50+ have been discussed the analysis will be separated by gender and this may aid in a clearer understanding of the results.

The divorce variable has a positive significant effect on the suicide rate which supports hypothesis 2. Married female labor force participation also has a positive

significant effect on the suicide rate which supports hypothesis 3. The unemployment variable has a positive significant effect on the suicide rate indicating that higher rates of unemployment among 20-29 year olds are associated with higher suicide rates. This is the age at which people begin to enter the labor force full time and being unemployed can be devastating. The mobility variable again has a negative significant effect on the suicide rate for 20-29 year olds in 1971. The sex variable retains its negative significant effect on the suicide rate.

The four remaining regional variables have differing effects on the suicide rate. 20-29 year olds living in both Quebec and ManSask have rates of suicide significantly above British Columbia whereas those living in Ontario and Alberta have significantly lower suicide rates. These variables add approximately 13% to the total explained variance (48%).

Table 28 presents the final equation for 20-29 year olds in 1981. The no religion variable here has a positive significant effect on the suicide rate. This supports hypothesis 1 and indicates that higher rates of no religion are associated with higher suicide rates. The divorce variable also has a positive effect on the suicide rate but it is not significant. Nonetheless the direction of effect for this variable supports hypothesis 2. It may be that the insignificant effect is due to the fact that divorce is becoming more prevalent and thus the stigma attached to a divorcee is less of a concern in 1981. Married female labor force participation has a negative effect on the suicide rate which is contrary to hypothesis 3. This suggests that society is more accustomed to married women working and it may no longer be a cause of disintegration. It may also be showing that the benefits of having two wage earners in the family out weigh the possible detrimental effects of the women no longer being at home. The unemployment variable has a positive significant effect on the suicide rate of 20-29 year olds in 1981. This supports hypothesis 4 and seems to indicate that being unemployed is a devastating event for 20-29 year olds who are just beginning to

enter the labor force. The mobility variables has the familiar negative significant effect on the suicide rate.

The sex variable retains its negative effect on the suicide rate, showing that in 1981 females have lower rates of suicide than males among 20-29 year olds. There were only two significant regional variables entered into the equation. These two regions had suicide rates below British Columbia and they both retain a negative significant effect on the suicide rate. 20-29 year olds living in the Atlantic and Ontario regions have significantly lower rates of suicide. The regional variables contribute 10% to the total explained variance of 37%.

The situation for 20-29 year olds seems to be described well by hypotheses 2 and 4 - since divorce and unemployment variables remained positive and significant for both time periods. The no religion and Mflfp variables are supported in one time period but not the other. However, the result of married female labor force participation in 1981 does seem to indicate that it is more accepted by society and thus no longer as disintegrating as in 1971. Throughout the analysis the mobility variable has remained negative and significant, two explanations have been suggested. One is that the excitement of beginning a new married life may overcome the disintegrating effects of moving. The second makes reference to the variables negative correlation with unemployment. The suggestion is that as unemployment increases, people are less willing to take a chance elsewhere in the province and prefer to stay where they are and wait until the situation improves. There is a difference in the amount of variance explained between the two time periods when sex is entered into the equation which indicates that in 1981, sex explains less of the variance in the suicide rates of 20-29 year olds than in 1971.

4.3c: Analysis of age group 30-49

The next age group to be analyzed is 30-49 year olds in 1971 and 1981. Table 29 presents the regression results of the regional variables in 1971 for this age group. The table shows that all of the regions have suicide rates significantly below British Columbia, with the Atlantic region having the lowest rate. Table 30 shows that in 1981 the regional variations are slightly different. The Atlantic region continues to have the lowest rate of suicide. There are two provinces that have suicide rates significantly above British Columbia , Alberta and Quebec. The Ontario region has virtually the same rate of suicide as British Columbia given that the very small difference is also insignificant. The region of ManSask has a rate of suicide significantly below British Columbia. The amount of explained variance is almost identical in the two time points (R^2=.11%).

Table 31 and 32 show the correlation matrices for 30-49 year olds in 1971 and 1981, respectively. In 1971, the variables no religion and divorce correlate positively and very highly (r=.808) which may indicate that the two variables measure the same dimension of integration. Collinearity may be a problem with this analysis because the correlation is so high. There is a positive correlation between mobility and divorce (r=.501) which has been obtained previously. The province of Quebec has a lower rate of married female labor force participation (r=-.589) and Ontario has a high rate (r=.526).

Table 32 shows the correlation matrix for 1981 and there is a positive correlation (r=.546) between no religion and divorce. Although the correlation is smaller than in 1971 it still indicates that a higher rate of divorce is positively associated with percentage of no religion. This is not an unusual result because divorce is not sanctioned by most Christian churches and thus those who divorce may be less religious. There is also a positive correlation between mobility and no religion (r=.659) which indicates that higher rates of mobility are associated with higher rates of no religion. There is also a very high positive correlation between mobility and divorce (r=.840). There is an inverse correlation between

unemployment and Mflfp (r=-.669) which is not surprising since the two are interrelated somewhat because if the unemployment rate is high the rate of Mflfp is unlikely to be high. The Atlantic and Quebec regions have lower rates of Mflfp (r=-.543 and r=-523 respectively) while the province of Ontario has a higher rate (r=.509). The last correlation of interest is that between the Atlantic region and unemployment (r=.659). This result has been obtained before and it indicates that the Atlantic region seems to have high rates of unemployment.

Tables 33 and 34 present the regression results of the social integration variables in 1971 and 1981. In Table 33 almost all of the social integration variables have a positive effect on the suicide rate with the exception of the divorce variable. Hypotheses 1, 3, 4 and 5 are supported by the results which show that higher rates of no religion, married female labor force participation, unemployment and mobility are associated with higher rates of suicide. The divorce variable has a negative effect on the suicide rate for this age group. The social integration variables explain approximately 16% of the variance in the logit of the 1971 suicide rate for 30-49 year olds.

Table 34 presents these results for 1981 and shows that three of the five integration variables have negative effects on the suicide rate. The no religion variable has a positive significant effect on the suicide rate supporting hypothesis 1. The divorce variable in 1981 has a positive significant effect on the suicide rate of 30-49 year olds which supports hypothesis 2. The married female labor force participation variable has a negative significant effect which shows that in 1981 30-49 year olds received benefits from Mflfp that seemed to reduce their rates of suicide. The unemployment variable has a negative significant effect on the suicide rate. It may be that unemployment is more common in 1981 than in 1971 and thus its effects are less disintegrating. The mobility variable has a negative significant effect on the suicide rate for 30-49 year olds in 1981. The social integration variables explain 28% of the variance in 1981. As was the case for 15-19 year olds, there are fewer hypotheses being supported in 1981 but the amount of explained

variance is higher. One possible reason is that in 1971 there was less of a need for women to work outside the home but in 1981, in an environment of high unemployment, married female labor force participation is more important to the economic well being of the family. This suggests that despite the poorer results, the situation in 1981 is better explained and thus may indicate that some of the hypotheses may have to be changed in future research.

Tables 35 and 36 present the effects when sex is added to the equations. Table 35 shows that the no religion variable has a negative effect on the suicide rate which indicates that higher percentages of no religion are associated with lower suicide rates. The remaining social integration variables all have positive significant effects on the suicide rate supporting hypotheses 2 through 5. The sex variable has a negative significant effect on the suicide rate of 30-49 year olds in 1971. This variable contributes approximately 12% to the total amount of explained variance (28%).

Table 36 shows these effects for 1981. The no religion variable is added to the variables that have a negative effect on the suicide rate. The divorce variable is the only one to have a positive significant effect on the suicide rate of 30-49 year olds in 1981. This supports hypothesis 2 and indicates that higher rates of divorce are associated with higher rates of suicide. The remaining variables all have negative significant effects on the suicide rate which are contrary to hypotheses 1, 3 4 and 5. The sex variable has a negative significant effect on the suicide rate indicating that females tend to have lower rates of suicide than males. The sex variable explains 5% of the total 33% of the explained variance.

The last two tables show the final equations for 1971 and 1981 when the regional variables are added. Table 37 shows that the no religion variable has a negative significant effect on the suicide rate. The divorce variable has a positive significant effect on the suicide rate which supports hypothesis 2 and indicates that provinces which have higher rates of divorce also seem to have higher suicide rates. Married female labor force participation has a positive significant effect on the suicide rate and this supports hypothesis

3. The unemployment variable has a positive significant effect on the suicide rate which supports hypothesis 4. The mobility variable has a negative significant effect on the suicide rate of 30-49 year olds in 1971 which is contrary to hypothesis 5. The sex variable continues to indicate that males seem to have higher rates of suicide than females. For the regional variables, 30-49 year olds living in the Atlantic, Ontario, ManSask and Alberta regions have lower rates of suicide compared to British Columbia. Those living in Quebec have higher rates of suicide. The regional variables contribute 6% to the total amount of explained variance (34%).

Table 38 presents the results for 1981. The no religion variable has a positive significant effect on the suicide rate which supports hypothesis 1. The divorce variable also has a positive significant effect on the suicide rate which supports hypothesis 2. Married female labor force participation has a negative insignificant effect on the suicide rate for 30-49 year olds in 1981. It may be that 30-49 year olds are benefitting from married female labor force participation. The unemployment variable has a negative significant effect on the suicide rate. This is contrary to hypothesis 4 since it indicates that provinces with higher rates of unemployment have lower rates of suicide. The mobility variable retains its negative effect on the suicide rate but the effect is insignificant.

The sex variable retains its negative significant effect on the suicide rate. Four of the five regional variables are entered into the equation for 1981. 30-49 year olds living in the Atlantic and Quebec regions have lower rates of suicide compared to British Columbia, while those living in ManSask and Alberta have higher rates of suicide. These regional variables explain only 2% of the total 35% of explained variance.

There are two consistent results between the two time periods, one is the positive effect of the divorce variable on the suicide rate of 30-49 year olds. The second is the negative effect of the mobility variable on the suicide rate. In 1971, the no religion variable has a negative significant effect on the suicide rate but in 1981 the effect is positive and insignificant. There is something about the no religion variable in 1971 because the same

result was obtained for 20-29 year olds. Married female labor force participation has a negative significant effect on the suicide rate in 1981. The same result was obtained for 20-29 year olds and this seems to indicate that in 1981 there was more benefits from married women working than in 1971. The rate of Mflfp increased over time and it may have become more accepted for married females to work and this would cause less disintegration in 1981 than in 1971. The unemployment variable also has a positive significant effect in 1971 and a negative significant effect in 1981. The amount of explained variance is approximately equal for the two time periods.

4.3d: Analysis of the age group 50 and over

The last age group to be analyzed are those aged 50 and over. Tables 39 and 40 present the regression coefficients for the effects of the regional variables on the suicide rate for this age group. In 1971, all of the regions have suicide rates significantly below British Columbia. The Atlantic region has the lowest rate of suicide and has had the lowest rate for all of the age groups in 1971. British Columbia has the highest rate of suicide in 1971 for this age group as it had for 30-49 year olds and 20-29 year olds. Only for those aged 15-19 did Alberta have a significantly higher rate of suicide than British Columbia. These variables explain 25% of the variance in the suicide rate.

Table 40 shows that in 1981 four of the five regions have suicide rates below British Columbia. The Atlantic and ManSask regions have rates significantly below British Columbia while Quebec and Ontario have rates insignificantly below British Columbia. The Atlantic region has the lowest rate of suicide as it did with all of the previous age groups. The province of Alberta has a suicide rate higher than British Columbia but the difference is not significant. There is no one region that has the highest rate of suicide throughout the age groups in 1981. These variables explain only 8% of the variance in the suicide rate.

Tables 41 and 42 show the correlation matrices of the variables used in the analysis of those aged 50 and over in 1971 and 1981, respectively. In Table 41, there is a positive correlation between divorce and no religion (r=.646). Divorce is against the teachings of most religions and thus those who do divorce may either leave their religion or are not attached to one initially. There is also a positive correlation between the suicide variable and no religion (r=.606) which seems to indicate that the higher the logit of the suicide rate the higher the rate of no religion. This is the expected result although the coefficient is slightly higher than anticipated. There is a positive correlation between married female labor force participation and divorce (r=.784). This may be indicating that the two variables are measuring the same dimension of domestic integration but it may also mean that higher rates of Mflfp are associated with higher rates of divorce. The latter explanation points out that married females who are working may be able to leave an unhappy marriage and be financially secure, which would tend to increase the divorce rate. There is a positive correlation between suicide and divorce (r=.536) which indicates that higher suicide rates are associated with higher divorce rates. The Atlantic region has a low rate of intra-provincial migration (r=-.796) in 1971 among those aged 50 and over. The last correlation coefficient of interest is that between sex and suicide (r=-.786) which shows again that females tend to have lower rates of suicide than males.

Table 42 presents the correlation matrix for 1981 and there are three coefficients of interest here. There is a high positive correlation between mobility and no religion (r=.852) which indicates that high rates of intra-provincial mobility are associated with higher rates of no religion. People who are unattached to an organized religion may move more freely than those who are attached to an organized religion. As in 1971, there is a high positive correlation between married female labor force participation and divorce (r=.777). The same two explanations apply here in 1981 as well as in 1971. The last correlation of interest is that between the Atlantic region and unemployment (r=.553). This is showing

that the Atlantic provinces have higher rates of unemployment. It is anticipated that none of these correlations will cause a problem with the analysis to follow.

Tables 43 and 44 present the regression results of the social integration variables on the suicide rate of those aged 50 plus. In 1971, the results show that three of the five integration variables support their hypotheses. No religion has a positive significant effect on the suicide rate as does divorce and unemployment. Married female labor force participation has a negative insignificant effect on the suicide rate. While the effect is not significant this result is reflecting the positive effect employment has on those aged 50 plus in 1971. The mobility variable has a negative significant effect on the suicide rate which has become the expected result. It may be that these people are moving closer to their grown children and this may reduce their rate of suicide. The social integration variables explain 43% of the variance in the suicide rate of those aged 50 plus in 1971.

Table 44 presents these results for 1981. The no religion variable has a positive insignificant effect on the suicide rate and the divorce variable has a positive significant effect on the suicide rate. Married female labor force participation has a negative effect on the suicide rate. The unemployment variable has a negative significant effect on the suicide rate of those aged 50 plus in 1981. This result was obtained for 30-49 year olds also and one explanation is that unemployment is more common in 1981 and thus less socially disintegrating than in 1971. The mobility variable retains its negative significant effect on the suicide rate. The social integration variables explain approximately 33% of the variance in the 1981 suicide rate of those aged 50 and over.

Tables 45 and 46 present the regression results when sex is added to the above equations. In 1971, divorce has a negative significant effect on the suicide rate for those aged 50 plus and this is contrary to hypothesis 2. The remaining integration variables have positive significant effects on the suicide rate. The no religion and unemployment variables seem to be unaffected by the addition of the sex variable. The sex variable has a negative significant effect on the suicide rate indicating that among those 50 and over females seem

to have lower suicide rates than males. The sex variable contributes approximately 40% to the total 83% of explained variance.

In Table 46 there are only two variables, divorce and mobility, that have positive significant effects on the suicide rate. The no religion variable has a negative significant effect on the suicide rate. Married female labor force participation retains its negative significant effect on the suicide rates as does the unemployment variable. The sex variable has the expected negative significant effect on the suicide rate and it contributes only 3% to the total amount of explained variance (36%).

The final equations for the age group are shown in Tables 47 and 48 when the regional variables are entered into the equation. In 1971, the no religion variable has a negative significant effect on the suicide rate for those aged 50 plus. The result indicates that provinces in which those aged 50 plus have higher rates of no religion also seem to have lower suicide rates. The divorce variable has a positive significant effect on the suicide rate which supports hypothesis 2. Despite the negative effects earlier, married female labor force participation has a positive effect on the suicide rate which supports hypothesis 3. The unemployment variable has a positive significant effect on the suicide rate which supports hypothesis 4. The mobility variable has a positive significant effect on the suicide rate which supports hypothesis 5.

The sex variable shows the expected negative effect on the suicide rate for those over 50. All five of the regional variables were significant and are thus entered into this equation. For those over 50, living in any of the regions is associated with lower suicide rates when compared to British Columbia. The Atlantic and Quebec regions have the lowest suicide rates for those 50 plus. The regional variable contributes 9% to the total 92% of explained variance.

In Table 48, no religion has a negative significant effect on the suicide rate. The divorce variable has the expected and hypothesized positive significant effect on the suicide rate. Married female labor force participation has a negative significant effect on the suicide

rate which is contrary to hypothesis 3. This indicates that provinces which have higher rates of Mflfp also have lower suicide rates. The best explanation seems to be that when married women work at this age, both males and females gain from their employment and this lowers suicide rates. The unemployment variable has a negative significant effect on the suicide rate which is opposite the hypothesized effect. This result would seem to indicate that as unemployment rates increase there is less social disintegration caused by being unemployed than when the rate is lower. The mobility variable is positive and significant which supports hypothesis 5.

The sex variable has a negative significant effect on the suicide rate. There are only two regional variables entered into the equation and both have positive but insignificant effects on the suicide rate. Those over 50 who live in the Atlantic and ManSask regions have higher suicide rates but not significantly higher than British Columbia. These two regional variables contribute virtually nothing to the total amount of explained variance (36%).

The two time points for the age groups do have some similar results. The no religion variable has a negative significant effect in both 1971 and 1981 indicating that higher rates of no religion for this age group leads to lower rates of suicide. The divorce variable is positive and significant for both time points supporting hypothesis 2 and indicating that divorce is socially disintegrating for those aged 50 plus. Married female labor force participation has a positive significant effect on 1971 but a negative significant effect in 1981. The rate of Mflfp increased over time and also became more socially acceptable. This may have allowed both males and females to gain something from women working which decreased their suicide rate. The unemployment variable has the same relationship as Mflfp in both time periods. This may be due to the increase in unemployment over time which would make being unemployed less socially disintegrating than when the rate was lower. The mobility variable has a positive significant effect in both 1971 and 1981. This supports hypothesis 5 and indicates that higher rates of intra-

provincial mobility leads to higher suicide rates. The model hypothesized in Chapter 2 captures the situation in 1971 better than that in 1981 as is shown by the amount of explained variance.

4.4: Analysis by Gender

The results presented in the previous sections indicated that some of the anticipated results did not materialize for the age groups. It is possible that by controlling for gender some new insights may be gained. It will also allow for an analysis of how married female labor force participation effects the sexes separately. The sections which follow will present the results, for males in 1971 and 1981, followed by females in these time points. As with the age groups, a series of tables will be presented for each time period. The first will show the regional variables, the second the correlation matrix, the third just the social integration variables, the fourth adds the age dummy variables and the last will add the significant regional variables.

4.4a: Males in 1971 and 1981

Tables 49 and 50 present the regression coefficients for the effects of the regional variables on the logit of the suicide rate for males in 1971 and 1981, respectively. In 1971, males in all of the regions have suicide rates lower than British Columbia, with ManSask and Alberta having insignificantly lower rates. In 1981, only the Atlantic and Ontario region have rates significantly below British Columbia. Quebec, ManSask and Alberta have rates above B.C. with Quebec and Alberta's rate significantly higher. The regional variables in 1971 explain 23% of the variance in the logit of the suicide rate and in 1981 the amount of explained variance is 25%.

Tables 51 and 52 show the correlation matrices for males in 1971 and 1981, respectively. In 1971, there is a high positive correlation between unemployment and 15-19 year olds (r=.841). Males in this age group have historically had high rates of unemployment and thus this correlation is not unexpected. 15-19 year olds also have lower suicide rates (r=-.601). The inverse correlation between the logit of the male suicide rate and male unemployment (r=-.651) is not in the expected direction. There is a positive relationship between no religion and divorce (r=.573) indicating that males with no religious preference may have a greater propensity toward divorce. There is a positive correlation between mobility and age 20-29 (r=.632), indicating that males in this age group move more intra-provincially. Some of the correlations are quite high and may cause problems of collinearity.

Table 52 shows slightly different correlation coefficients. The high positive correlation between 15-19 year olds and unemployment (r=.776) remains, as does the positive relationship between mobility and 20-29 year olds (r=.597). There is a positive relationship between no religion and mobility (r=.655) which suggests that males with no religious affiliation may move more intra-provincially. There is a positive relationship between divorce and mobility (r=.556) indicating that males who divorced in 1981 may have made more intra-provincial moves. This is not unusual considering that when a couple splits up, one of them usually moves. The last correlation of interest is the positive relationship between Mflfp and mobility (r=.566). This may be indicating that wives employment increases the family income allowing them to relocate to a better area or that they are moving so that the wife may accept better employment.

Tables 53 and 54 show the effects of the social integration variables on the logit of the male suicide rate in 1971 and 1981, respectively. In 1971, no religion and Mflfp have positive significant effects on the logit of the male suicide rate. Divorce, mobility and unemployment have negative significant effects on the logit of the male suicide rate. Male have historically had high rates of unemployment and it is possible that it is not

disintegrating for them, especially if they have other areas of their lives intact. Mobility seems to be indicating that making an intra-provincial move may not be as disintegrating for males. These variables explain 52% of the variance in the logit of the male suicide rate in 1971.

In Table 54, the only variable to have a positive significant effect is mobility, which suggests that males who made an intra-provincial move between 1976 and 1981 may have had higher rates of suicide. No religion, divorce, Mflfp and unemployment all had negative significant effects on the suicide rate. The negative effect of Mflfp may be reflecting the increased acceptance of women working and thus it would not have as great a disintegrating effect in 1981 as it had in 1971. Divorce and unemployment remain unchanged from 1971. No religion's negative effect on the suicide rate may be tapping the fact that males have higher rates and perhaps do not find having no religious affiliation to be disintegrating. The social integration variables explain only 21% of the variance in the logit of the suicide rate for males in 1981.

Tables 55 and 56 show the regression coefficients when the age dummy variables are added to the above equations for 1971 and 1981, respectively. In Table 55, all of the social integration variables remain as they were in Table 53. The age dummy variables all have negative significant effects on the suicide rate, indicating that they all have lower rates of suicide than those over 50. The age variables explain approximately 10% of the total explained variance (62%).

Table 56, shows that no religion and unemployment have negative significant effects, while divorce, Mflfp and mobility all have positive significant effects. The 15-19 age group has higher suicide rates than those over 50. The other age groups have negative effects with only the 30-49 year olds having significantly lower rates. The age variables explain approximately (6%) of the total amount of explained variance (27%).

Tables 57 and 58 present the final regression coefficients when the significant regional variables are added to the above equations. In 1971, Table 57, the social

integration variables show almost the same effects as previously. No religion has a positive effect on the logit of the male suicide rate in 1971, as does Mflfp. Divorce, unemployment and mobility all have negative effects on the suicide rate. The age variables all show lower suicide rates than for those over 50. Males in the Atlantic, Ontario and ManSask regions have lower rates of suicide the those in British Columbia. Those in Quebec have suicide rates insignificantly higher than those in B.C.. The regional variables add 6% to the final 68% of explained variance.

Table 58, shows the results for 1981. No religion, Mflfp and mobility all have positive effects on the logit of the male suicide rate, but mobility's rate is insignificant. Divorce and unemployment have negative effects, with unemployment having a significant negative effect on the suicide rate. For the age groups only those aged 30-49 have suicide rates significantly below those over 50. The other two age groups have rates insignificantly above those over 50. The Atlantic and Ontario regional variables have suicide rates below those of British Columbia with Ontario having significantly lower rates. Quebec, ManSask and Alberta all have significantly higher suicide rates. The regional variables add 15% to the total amount of explained variance (42%).

The primary purpose in repeating the analysis controlling for gender was to determine the impact of married female labor force participation on the sexes individually. In 1971 and 1981, Mflfp consistently has a positive effect on the suicide rate of males, thereby increasing their suicide rates. Of the other integration variables, divorce has a negative effect on the logit of the male suicide rate in 1971 and 1981. Generally, no religion has a positive significant effect on the logit of the suicide rate in 1971. In 1981, the effect tends to be negative but in the final equation its effect is significantly positive. The unemployment variable has a negative effect on the logit of the male suicide rate for 1971 and 1981. This seems to indicate that unemployment is not disintegrating for males. The mobility variable, generally, has a negative significant effect on the logit of the male suicide rate in 1971, but positive in 1981. This seems to show that moving intra-

provincially in 1981 may be more disintegrating than in 1971. The sense of community may have been stronger in 1971 which would allow a person who moved greater support than in 1981 when the sense of community was weaker. In 1981, the regional variables explain 15% of the variance which seems to indicate that there is something about the situation in the regions that better explains the suicide rate of males than some of the other variables.

4.4b: Females in 1971 and 1981

Tables 59 and 60 show the effects of the regional variables on the logit of the female suicide rate for 1971 and 1981, respectively. In 1971, all of the regions have suicide rates significantly below British Columbia, with the Atlantic region having the lowest. In 1981, only the Atlantic region has a suicide rate significantly below British Columbia. Ontario and ManSask have rates below B.C., but not significantly. Quebec and Alberta have insignificantly higher suicide rates. The amount of explained variance is similar for the two time points, around 20%.

Tables 61 and 62 present the correlation matrices for females in 1971 and 1981, respectively. In 1971, as with males, 15-19 year old females have high rates of unemployment (r=.909) and 20-29 year olds move more intra-provincially (r=.835). There is a moderate correlation between no religion and divorce (r=.608). This indicates that women who have no religious affiliation may have a higher rate of divorce. The last correlation of interest is the positive relationship between divorce and Mflfp (r=.523). This seems to point to a relationship, such that women who work are better able to leave an unsatisfying relationship. Two of the above coefficients are quite high and may be indicating that collinearity is a problem.

In 1981, Table 62, unemployment and the 15-19 year old age group correlate positively (r=.787) as does mobility and the 20-29 year age group (r=.724). All of the

correlations of interest for females in 1981 were obtained for males in that year, which seems to indicate that the situation is similar for both sexes in that year. There is a moderate positive correlation between divorce and mobility (r=.687), which is not surprising because when a divorce takes place one or the other partner usually moves. There is a positive relationship between mobility and Mflfp (r=.605) which indicates that when a women works the family may be better able to afford to move to a better location or the family may relocate so the wife is closer to her work.

Tables 63 and 64 show the effects of the social integration variables on the logit of the female suicide rate in 1971 and 1981, respectively. In 1971, no religion, divorce and Mflfp all have positive significant effects on the logit of the female suicide rate. Unemployment also has a positive effect but it is not significant. Mobility has a negative significant effect on the logit of the female suicide rate. It is possible that the strong sense of community normally prevalent in 1971 provides enough support to outweigh any negative effects. The social integration variables explain approximately 11% of the variance in the logit of the female suicide rate.

Table 64 shows that the situation in 1981 is quite different from that in 1971. No religion and Mflfp have positive significant effects on the logit of the female suicide rate. Divorce, unemployment and mobility all have negative significant effects. Divorce seems to be less disintegrating for females in 1981 and one possible explanation is that divorce was more common. Unemployment is not as high for females and thus even when they become unemployed it seems not to be as disintegrating for them. Mobility may be showing that intra-provincial mobility is not an adequate indicator of social integration. The variables explain approximately 16% of the variance in the logit of the suicide rate for females in 1981.

Tables 65 and 66 present the regression coefficients for the effects of the social integration and age variables on the logit of the female suicide rate in 1971 and 1981, respectively. In 1971, all of the social integration variables have positive significant effects

on the suicide rate. The age variable all have suicide rates significantly below those over 50. Adding the age variables explains approximately 10% more of the variance than just the social integration variables alone.

In 1981, the results are not as favorable. No religion has a positive but insignificant effect on the suicide rate. Divorce and Mflfp both have positive significant effects on the suicide rate for females. Unemployment and mobility show the usual negative significant effects. 15-19 year old females have significantly higher suicide rates than those over 50, while the other ages have negative significant effects. The age groups explain only 4% of the total explained variance (19%).

Tables 67 and 68 present the final regression equations when the significant regional variables are added. In 1971, no religion, divorce, Mflfp and unemployment all have positive significant effects on the logit of the suicide rate for females. Mobility has a negative significant effect, indicating again that this may not be an appropriate variable to use. All of the age variables have suicide rates insignificantly below those of British Columbia. Quebec, Ontario and ManSask all have suicide rates significantly higher than British Columbia. The regional variables explain 9% of the total amount of explained variance (30%).

In 1981, no religion has a negative but insignificant effect on the logit of the suicide rate. Unemployment and mobility have negative significant effects on the suicide rate. Divorce and Mflfp have positive significant effects on the logit of the female suicide rate. In 1981, unemployment seems to be less socially disintegrating for females than in 1971. Making an intra-provincial move may not be socially disintegrating for females, but another explanation is that the variable is not an adequate indicator. 15-19 year olds in 1981 have significantly higher rates of suicide than those over 50. The other age groups have rates significantly below those aged 50 plus. The Atlantic region is the only variable to be entered into the equation and it shows that females in this region have lower rates of suicide

than those in British Columbia. The Atlantic region adds 7% to the total 27% of explained variance.

When the results obtained for the females are compared to males there is one interesting result. In both 1971 and 1981, married female labor force participation has a positive significant effect on the logit of the suicide rate for females and males. The results for females indicates that working while married is very stressful and disintegrating, even when society becomes more accepting. For the other social integration variables, no religion and divorce generally have positive significant effects on the logit of the female suicide rate in both 1971 and 1981. Unemployment and mobility also generally have positive significant effects on the logit of the suicide rate in 1971 while in 1981 the effects are negative.

Controlling for sex allowed for a better determination of how married female labor force participation effected males and females. The analysis however, did not add much to the understanding of why some of the variables did not have the anticipated results for the age groups. The next chapter will attempt to pull together all that has been found in the above sections and draw some conclusions from them.

Chapter 5: Conclusions and Implications

This chapter will pull together the main findings presented in the previous chapter and attempt to explain or offer reasons for some of the conflicting results. The extent of the unexpected effects depends upon which series of tables one wishes to draw the conclusions from. The tables showing just the effects of the social integration variables is one of the obvious choices but this fails to take into account the gender or regional effects. All of the variables were included in the analysis in order to better understand the situation in Canada. Ignoring part of the analysis only allows us to determine part of the picture. Thus, the conclusions will be drawn from the final series of tables in which the social integration, sex and regional variables are all included into the analysis.

5.1: Summary and Conclusions

The question which guided this thesis was how the concept of social integration is related to suicide in Canada. Five variables were chosen to represent four dimensions of the social integration concept. The percentage of people stating no religious affiliation in the 1971 and 1981 Censuses of Canada, was chosen as the variable to test the religious individualism dimension. Two variables, age-sex specific divorce rates and married female labor force participation, were chosen to test the domestic integration dimension. The unemployment rate was used as a test for economic anomie. The last variable, percentage of people making an intra-provincial move between 1966-71 and 1976-81, was used to measure to effects of mobility. Each of the variables will be discussed in turn below.

Hypothesis 1 stated that higher percentages of people stating no religious preference would be associated with higher suicide rates. The strongest results for this hypothesis came from the 15-19 year old age group in both 1971 and 1981. The propensity to be non religiously affiliated is highest for persons in their late teens to late twenties (Veevers and Cousineau, 1980; Pryor and Norris, 1988) and thus if percent no religion is related to

suicide it should be seen strongly in those aged 15-19. Many religions have programs aimed specifically at this age group which help to establish ties with others of their age and provide them with activities with which to occupy their time. Youths who are not attached to any religion would not have this avenue open to them and thus if they possess the propensity toward suicide they may be more likely to commit the act.

The remaining age groups show mixed effects for the two time periods. In general, no religion's effect on suicide in 1971 is negative for these age groups. In 1981, no religion's effect on the logit of the suicide rate for 20-29 and 30-49 year olds is positive but for those aged 50 plus the effect is negative. There are a few possible explanations for these mixed results. Firstly, there is evidence which suggests that those who are not religiously affiliated may re-affiliate when they view the act as beneficial to themselves. This generally occurs when the person wishes to be married or have a child baptized (Bibby, 1987). This may suggest that not belonging to a religion may not be socially disintegrating because individuals may feel they can make use of religious services whenever the need arises. The second, explanation is that collinearity has biased the results. This would produce effects that are unreliable and possibly in the opposite direction then that anticipated. One possible way around this problem in future research is to do a factor analysis of all the variables thereby extracting the underlying factor(s) which relate the highest to all of the variables and use these factor scores in the regression analysis.

Hypothesis 2 stated that higher divorce rates would be associated with higher suicide rates. In general, this seems to be the case for all of the age groups. This indicates that despite the fact that divorce is becoming a common occurrence, its impact on psychological well-being is still negative thereby allowing us to conclude that provinces with higher rates of divorce also seem to have higher suicide rates.

Hypothesis 3 stated that higher rates of married female labor force participation would lead to higher suicide rates. The actual results are quite interesting. For those aged

20 and over, the effects of this variable (Mflfp) are positive in 1971 but negative in 1981. The incidence of working women was not as high in 1971 and was not socially acceptable. Working women and their families would thus receive little societal support and may encounter more social disintegration. In 1981, however, the proportion of married women who worked increased and it had become more socially acceptable. Two conclusions for this variable are offered. In 1971 higher rates of married female labor force participation are associated with higher suicide rates. In 1981, higher rates of married female labor force participation are associated with lower suicide rates.

Hypothesis 4 stated that higher rates of unemployment would be associated with higher suicide rates. The younger age groups, 15-19 and 20-29, support this hypothesis for both time points but 30-49 year olds and those aged 50 and over show this relationship for 1971 only. In 1981, for those age groups, the relationship is negative. It would seem that being unemployed at ages 29 and below is very disintegrating because this is the age when they begin to establish independence and a family. This is also the period when an individual establishes a career and interruption in the form of unemployment, may seriously inhibit their abilities to find work at a later time. The negative relationship in 1981, for the age groups 30-49 and 50 plus is probably reflecting that in 1981, unemployment was much more common and thus less of a cause of disintegration. The relationship between unemployment and suicide in cross-sectional studies has historically been mixed (Platt, 1984) and thus the results are not all that surprising.

The last hypothesis stated that higher rates of intra-provincial mobility would lead to higher suicide rates. Only one of the age groups support this hypothesis, 50 plus in 1971. The lack of support for this hypothesis is surprising and for the purpose of the thesis only one conclusion is possible; intra-provincial mobility, net of no religion, divorce, married female labor force participation and unemployment, does not capture the disintegrating effects of moving. More will be said about this variable in the next section.

Regional dummy variables were included in the final analysis if they were significantly different from British Columbia. Many of these variables remained significant which indicated that the situation in these regions were different from British Columbia's and thus warrant discussion. We anticipated that once all the other variables had been taken into account, the effects of regional variables would be insignificant. There are many possible reasons for the significant effects of the regional variables, but the most probable is that they reflect variables not included in the analysis that may help explain suicide rates in these regions. The National Task Force (1987) noted that between 1969-71 and 1979-81, increases in economic pressure and diminishing integration in society increased the suicide rate. Variables such as alcoholism, drug abuse, decreasing family size, criminality and transiency, all increase suicide levels. None of these variables are included in this analysis and there are also a number of social-psychological and individual level variables that have been shown to effect suicide and none of these are measured in this study.

The Task Force (1987) also identified a few provincial programs in the areas of suicide prevention (measures taken to reduce the prevalence of suicide), intervention (procedures used in managing suicide crisis) and postvention (measures to be taken following a suicide). The existence or non-existence of such programs in the regions under study would have an effect on whether the regional variables have a significant effect on the logit of the suicide rate. In general, most provinces, except Alberta, do not have well established programs in any of the three areas. It is one of the recommendations of the Task force (1987:60) that "the Alberta model of a system for suicide prevention should be assessed ... for possible implementation in their jurisdiction". There is very little indepth research in any of the three areas of suicide programs and thus further research should attempt to determine the effectiveness and best type of such programs.

The analyses were repeated with gender as a control variable to better understand the previous results. One variable, Mflfp, consistently showed positive effects on the suicide rate of both males and females when all the variables were included in the analysis.

The remaining social integration variables showed mixed results. More work needs to be done in order to determine whether mixed results may be a function of collinearity, and if so, means to rectify it.

There are some general reasons for some of the unexpected results that need to be discussed. One of these is that there could be a threshold value for many of the variables. That is, a certain value that when reached, increases the suicide rate. This may be the case for unemployment and possibly for some of the other variables. A second possibility is that there is a selectivity phenomenon at work in this analysis. It is possible that the negative results are obtained because people to whom the relationship applied have already committed suicide and thus are removed. This can really only be confirmed in an analysis which is at the individual level, as aggregate data does not allow for conclusions on the level needed to test for this effect.

The last possibility concerns the suicide data itself. All of the provinces in Canada are responsible for establishing their own system of classifying deaths. This means that there will be a difference between provinces as to what defines a suicide. British Columbia and Alberta use the Medical Examiner system which is suggested to be the best. These two provinces also have among the highest suicide rates in Canada. The inconsistent classification systems may lead to faulty data which could cast doubt over all of the results. Using a three year average for the suicide rates in some way attempt to cope with the problem but it may not have eliminated it completely.

5.2: Implications

The above discussion has raised some questions which can be investigated in future work. This section will first look at the implications of this study for theory, followed by some suggestions for future research. Lastly, it will discuss the implications for suicide prevention.

Theory suggested that religious individualism would have a negative effect on the suicide rate. This analysis has failed to fully support the theory on this dimension. Some of the age groups strongly support the hypothesis while others fail to do so. It is possible that the chosen variable does not adequately measure individualism. It was shown above that those who report no religious affiliation do use the religious rites of passage and this may decrease the disintegrating effects of no religion. Another possibility is that those who report no religion are not necessarily less religious. I believe that in order to truly capture the religious individualism dimension other variables such as belief in God or average church attendance could be used to this extent.

The theory surrounding the domestic integration dimension is partially supported. This study has shown that divorce remains a good predictor of increased suicide rates as it consistently showed positive effects on suicide. One thing to consider for future research is whether or not divorce is really measuring social disintegration. It is possible that divorced individuals have more interpersonal contacts. I do not believe this to be a problem in this analysis but it is something to consider in future research.

Married female labor force participation had positive effects on suicide in the majority of the regression equations. This is one variable that should be continued to be used, as the impact it has on males and females separately must be continually studied in order for some form of theoretical consensus to be developed. It should be pointed out that for this analysis, that as unemployment rose, married female labor force participation became more important for the economic well being of the family. This should be kept in mind for future research as it does have possible implications for how both unemployment and Mflfp perform in the analysis.

The final two variables, unemployment and intra-provincial mobility provided such mixed results that they failed to support the theory surrounding their development. Economic anomie, as measured by unemployment, is rarely supported in cross-sectional studies and thus the results which were obtained were not entirely unexpected. However,

the chart analysis presented in Chapter 4 also showed that when change over time is considered both unemployment and suicide increased. This method may provide better results where the unemployment variable is concerned.

The effects of mobility were so unreliable that it also cold be left out of future research. In the case of intra-provincial mobility it may be that the theory needs to be corrected. One of the major reasons people give for moving is employment related. That is, people move to a job or to an area where they believe the opportunities are better. In this analysis it was shown that when unemployment was high, intra-provincial mobility was low. People prefer to stay in an environment where they feel comfortable and wait for the situation to improve. The relationship may not be found in other analyses but it should be kept in mind for future research.

The most promising course for future research is to employ the factor analysis technique to the variables no religion, divorce and Mflfp and using the factor scores in the regression (Stack, 1985; Trovato and Vos, 1990). This will eliminate problems of collinearity and also find the common threads that cause these variables to measure similar effects. Another suggestion for future research is to apply. Direct Standardization within the regression analysis to separate the compositional effects of age and sex from the substantive effects of these variables on suicide, that is age and sex as social-biological factors. A third alternative is to use a change over time procedure which may help clarify some of the problem variables. Future work should also continue to pay attention to the effects married female labor force participation has on males and female separately. The variable working women with pre-school aged children should be included for an even clearer understanding of the effects of female labor force participation on women and men.

The implications this study has on suicide prevention is confined to helping identify possible high risk groups. 15-19 year olds seem to hold a high risk of suicide. In general, areas which have high divorce rates would also be expected to have high suicide rates and prevention programs and education programs could be aimed at these areas. As well, areas

in which a high proportion of married women work, should be targeted also. Programs designed to alleviate some of the pressures, such as affordable day care or good after school care, may help reduce the stressful impact of work on the family and may lower the risk of suicide.

Tables and Charts Referred to in the Text

Table 1. Correlation Matrix for the Variables used in the Preliminary Regression Analysis.

	Sr3yr	Sex	Time	Norelig	Divorce	Mflfp	Unemp.	Mobility
Sr3yr	1.00							
Sex	-.801	1.00						
Time	.060	.004	1.00					
Norelig	.321	-.242	.230	1.00				
Divorce	.153	-.010	.315	.476	1.00			
Mflfp	.065	-.012	.517	.439	.504	1.00		
Unemp.	-.281	.052	.149	-.132	-.352	.186	1.00	
Mobility	-.039	.011	-.577	.239	.239	.042	-.155	1.00
P1	-.229	-.003	-.002	-.218	-.184	-.187	.177	-.117
P2	-.062	-.0001	-.005	-.134	-.026	-.080	.059	-.085
P3	-.093	.0001	-.003	-.162	-.092	-.062	.108	-.107
P4	.001	.002	-.008	-.378	-.037	-.159	.167	.032
P5	.013	.002	-.005	-.009	-.001	.193	-.102	.003
P6	.010	.001	.002	-.012	-.031	.069	-.082	-.062
P7	.056	.003	-.003	-.050	-.090	.004	-.120	.002
P8	.092	-.005	.016	.189	.194	.110	-.137	.115
A1	-.229	-.005	-.013	-.030	-.429	.085	.781	-.132
A2	.005	-.001	.001	.117	-.136	.305	.099	.317
A3	-.018	-.002	.011	.151	.358	.126	-.062	.429
A4	-.023	-.002	.018	.122	.391	.070	-.120	.219
A5	-.004	-.004	.003	.045	.258	.083	-.136	.031
A6	.035	-.004	-.013	-.012	.134	.118	-.136	-.084
A7	.097	-.003	-.017	-.052	.021	.048	-.133	-.168
A8	.115	-.0003	-.009	-.096	-.081	-.029	-.142	-.219
Mean	17.18	.502	.528	6.11	591.93	45.27	11.46	28.27
Std. Dev	11.07	.500	.499	5.75	506.84	16.85	12.25	14.43

Table 1. Correlation Matrix Continued.

	P1	P2	P3	P4	P5	P6	P7	P8
P1	1.00							
P2	-.066	1.00						
P3	-.063	-.017	1.00					
P4	-.119	-.136	-.128	1.00				
P5	-.130	-.148	-.139	-.268	1.00			
P6	-.072	-.082	-.077	-.147	-.166	1.00		
P7	-.069	-.079	-.074	-.143	-.155	-.085	1.00	
P8	-.084	-.096	-.090	-.172	-.188	-.103	-.100	1.00
A1	.011	.002	.007	.001	-.005	-.004	-.0001	.001
A2	.005	-.002	-.002	.002	-.004	-.005	-.004	.010
A3	.002	-.003	-.001	.004	-.002	-.005	-.007	.010
A4	.000	-.0003	-.002	.003	.002	-.007	-.005	.004
A5	.001	-.0003	-.003	.005	.004	-.007	-.008	.002
A6	-.002	-.001	-.002	.004	.005	-.005	-.004	-.002
A7	-.002	-.001	-.002	.003	.005	-.004	-.001	-.002
A8	-.004	.003	-.001	-.0001	.003	-.003	.002	-.005
Mean	.055	.070	.063	.197	.226	.081	.076	.108
Std. Dev	.228	.256	.242	.398	.418	.273	.266	.310

Table 1. Correlation Matrix Continued.

	A1	A2	A3	A4	A5	A6	A7	A8
A1	1.00							
A2	-.138	1.00						
A3	-.133	-.131	1.00					
A4	-.129	-.127	-.122	1.00				
A5	-.124	-.121	-.117	-.113	1.00			
A6	-.120	-.118	-.114	-.110	-.105	1.00		
A7	-.119	-.117	-.112	-.109	-.104	-.101	1.00	
A8	-.117	-.115	-.110	-.107	-.102	-.099	-.098	1.00
Mean	.124	.119	.112	.106	.098	.093	.091	.088
Std. Dev	.329	.325	.316	.308	.297	.290	.288	.283

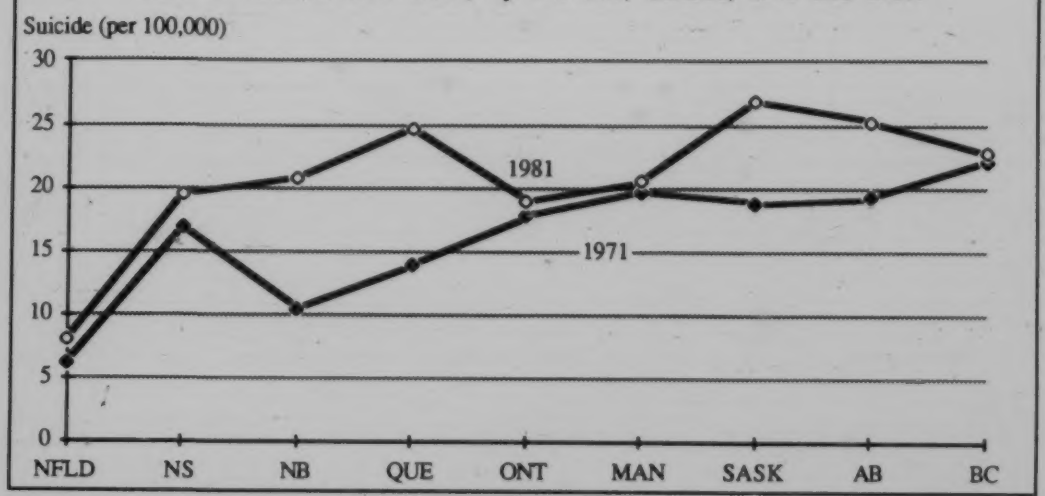
Table 2. Correlation Matrix for Variables Used in Hypotheses Testing.

	Lsui	Sex	Time	Norelig	Divorce	Mflfp	Unemp	Mobility
Lsui	1.00							
Sex	-.414	1.00						
Time	.002	.004	1.00					
Norelig	.209	-.242	.230	1.00				
Divorce	.125	-.010	.315	.476	1.00			
Mflfp	.054	-.012	.517	.439	.504	1.00		
Unemp	-.243	.052	.149	-.132	-.352	.186	1.00	
Mobility	.005	.011	-.577	.239	.239	.042	-.155	1.00
Atlantic	-.319	-.002	-.006	-.315	-.181	-.199	.208	-.190
Quebec	.055	.002	-.008	-.378	-.037	-.159	.167	.032
Ontario	.078	.002	-.005	-.009	-.001	.193	-.102	.003
ManSask	.055	.003	-.001	-.045	-.088	.055	-.149	-.045
Alberta	.070	-.005	.016	.189	.194	.110	-.137	.115
15-19	-.135	-.005	-.013	-.030	-.429	-.085	.781	-.132
20-29	-.043	-.003	.009	.203	.163	.329	.030	.564
30-49	.051	-.007	-.005	.066	.496	.193	-.318	.007
Mean	-9.09	.502	.528	6.10	591.9	45.27	11.46	28.27
Std.Dev.	1.89	.500	.499	5.75	506.8	16.85	12.25	14.43

Table 2. Correlation Matrix Continued.

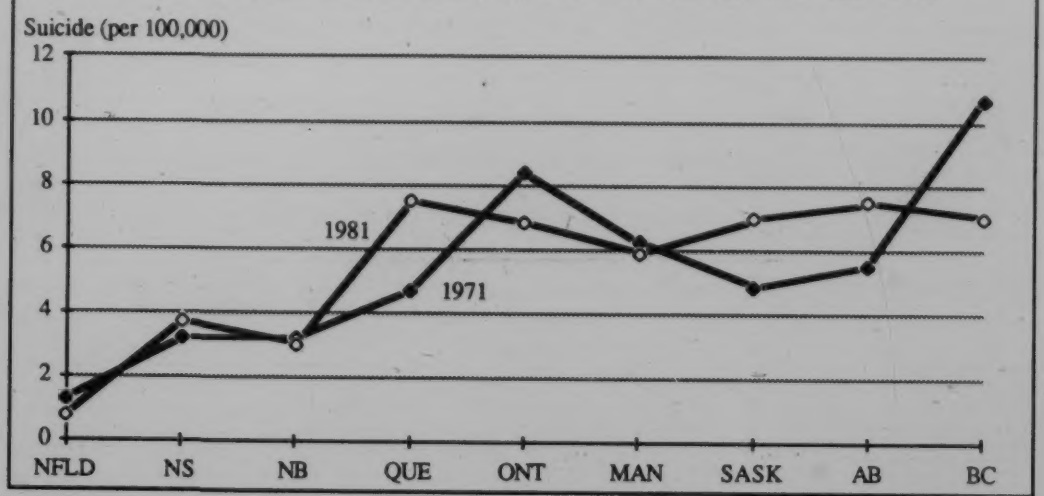
	Atlantic	Quebec	Ontario	ManSask	Alberta	15-19	20-29	30-49
Atlantic	1.00							
Quebec	-.238	1.00						
Ontario	-.260	-.268	1.00					
ManSask	-.208	-.214	-.233	1.00				
Alberta	-.167	-.172	-.188	-.150	1.00			
15-19	.012	.001	-.005	-.003	.001	1.00		
20-29	.001	.005	-.005	-.011	.015	-.206	1.00	
30-49	-.006	.008	.009	-.018	.002	-.298	-.437	1.00
Mean	.188	.197	.226	.158	.108	.124	.232	.387
Std.Dev.	.391	.398	.418	.364	.310	.329	.422	.487

Chart 1: Male Suicide Rates, By Province, Canada, 1971 and 1981.



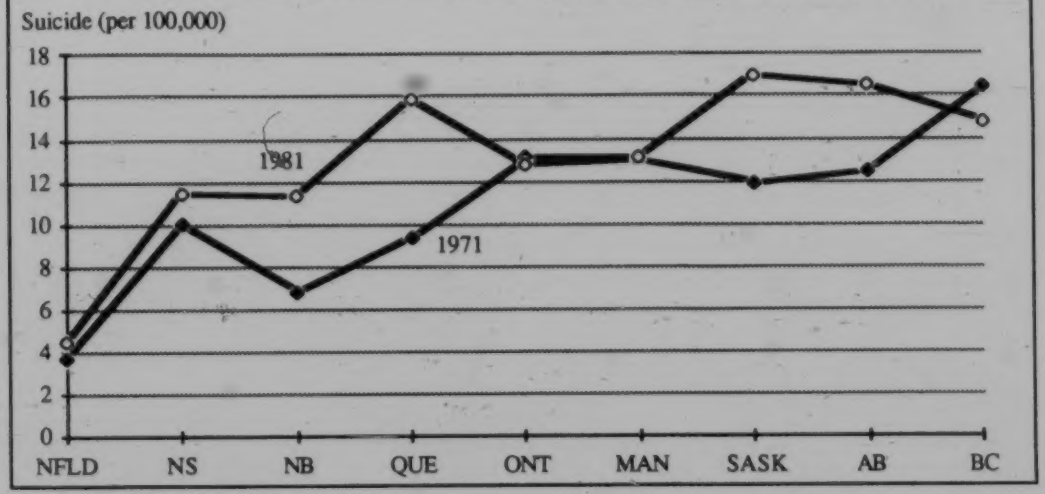
Source: See Table A15

Chart 2: Female Suicide Rates, By Province, Canada, 1971 and 1981.



Source: See Table A15

Chart 3: Total Suicide Rates, By Province, Canada, 1971 and 1981.



Source: See Table A15

Table 3: Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on the Suicide Rate (three year average).

Variable	b	SEb	Beta	t
Time	1.198971	1.200324	.052609	.944
NFLD	-13.959259	2.546283	-.384989	-5.482***
N.S.	-5.998148	2.546283	-.165426	-2.356*
N.B.	-7.584259	2.546283	-.209170	-2.979***
Que.	-3.539815	2.546283	-.097626	-1.390
Ont.	-3.270370	2.546283	-.090195	-1.284
Man.	-3.287963	2.546283	-.090680	-1.291
Sask.	-1.525926	2.546283	-.042084	-.599
Alta.	-.857407	2.546283	-.023647	-.337
(Constant)	20.320885	1.897887		10.707***

R^2=.12896 F=.51656***, df=9/314

adjR^2=.10400

*** ≤ .001

* ≤.05

Table 4: Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1971 Suicide Rate (three year average).

Variable	b	SEb	Beta	t
NFLD	-16.261111	3.337589	-.475421	-4.872***
N.S.	-8.742593	3.337589	-.255604	-2.619**
N.B.	-12.342593	3.337589	-.360856	-3.698***
Que.	-9.611111	3.337589	-.280997	-2.880**
Ont.	-4.431481	3.337589	-.129562	-1.328
Man.	-4.840741	3.337589	-.141527	-1.450
Sask.	-6.105556	3.337589	-.178506	-1.829
Alta.	-4.883333	3.337589	-1.42772	-1.462
(Constant)	23.342593	2.360032		9.891***

R^2=.18053 F=4.2131***, df=8/153

adjR^2=.13768

*** ≤ .001

** ≤ .01

Table 5: Regression Coefficients for the Effects of Provincial Dummy Variables on the 1981 Suicide Rate (three year average).

Variable	b	SEb	Beta	t
NFLD	-11.657407	3.828805	-.35901	-3.045**
N.S.	-3.253704	3.828805	-.085380	-.850
N.B.	-2.825926	3.828805	-.074155	-.738
Que.	2.531481	3.828805	.066428	.661
Ont.	-2.109259	3.828805	-.055349	-.551
Man.	-1.735185	3.828805	-.045533	-.453
Sask.	3.053704	3.828805	.080132	.798
Alta.	3.168519	3.828805	.083145	.828
(Constant)	18.498148	2.707374		6.833***

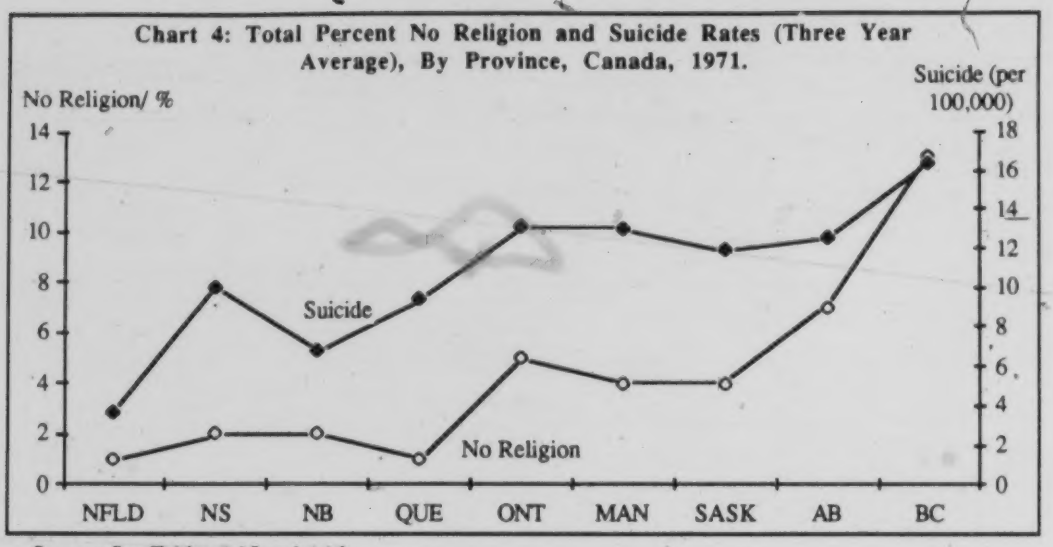
R^2=.13124 F=2.8892**, df=8/153

adjR^2=.08582

*** ≤ .001

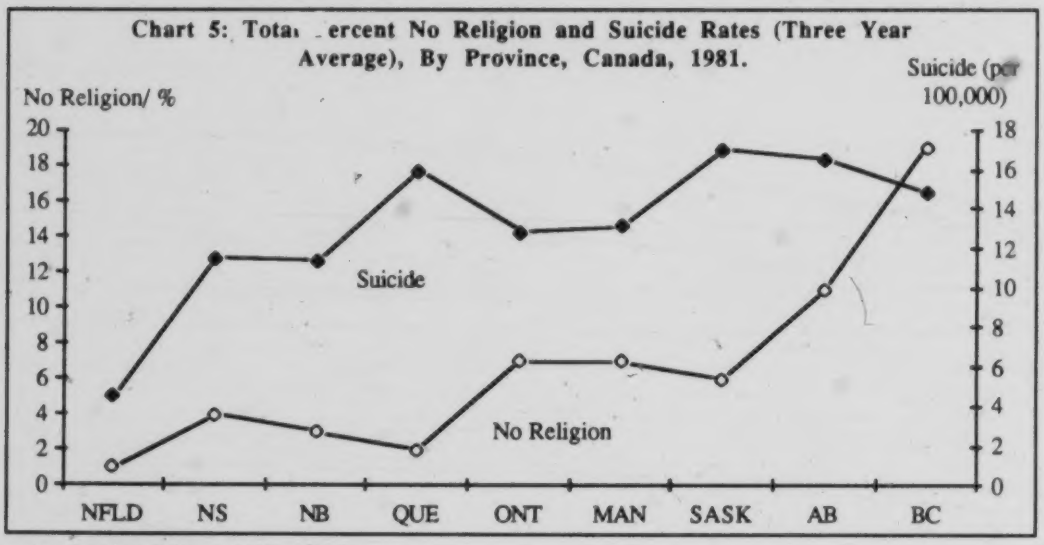
** ≤ .01

Chart 4: Total Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1971.



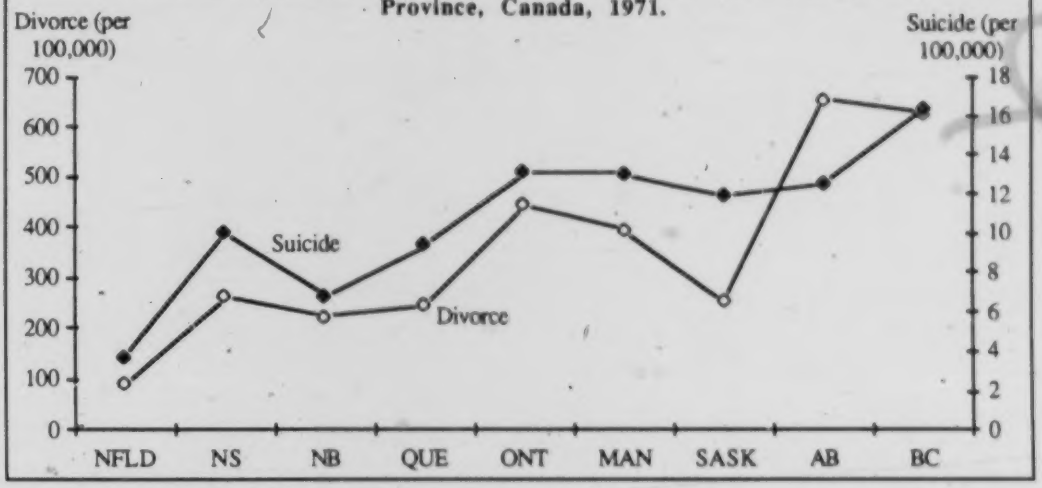
Source: See Tables A15 and A16

Chart 5: Total Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1981.



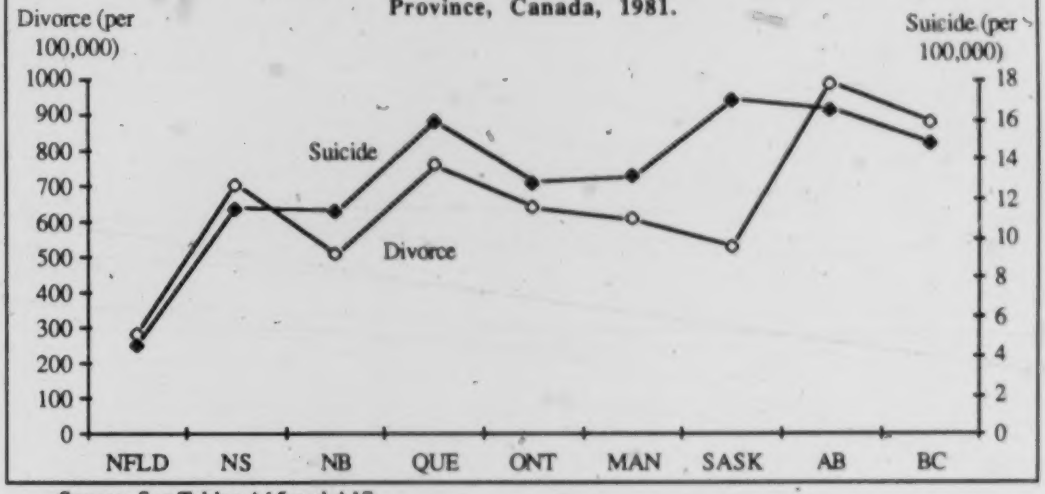
Source: See Tables A15 and A16

Chart 6: Total Divorce and Suicide Rates (Three Year Average), By Province, Canada, 1971.



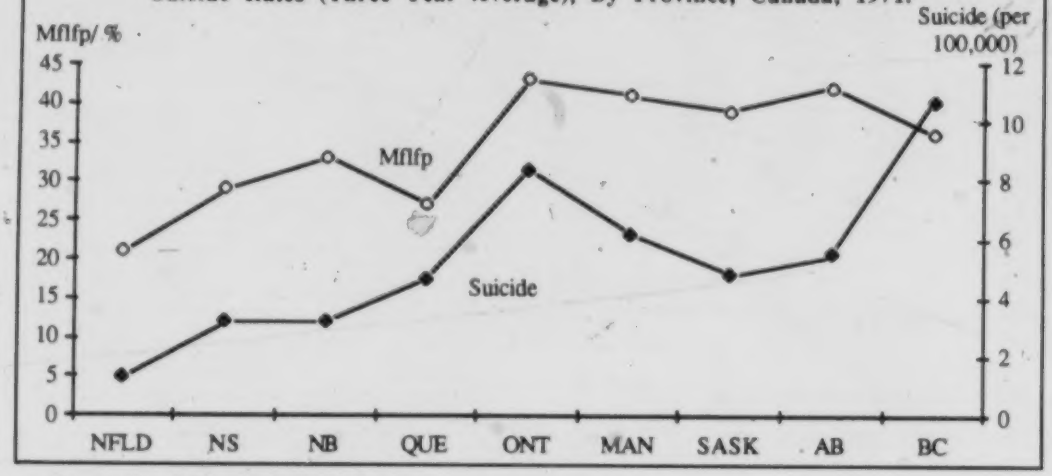
Source: See Tables A15 and A17

Chart 7: Total Divorce and Suicide Rates (Three Year Average), By Province, Canada, 1981.



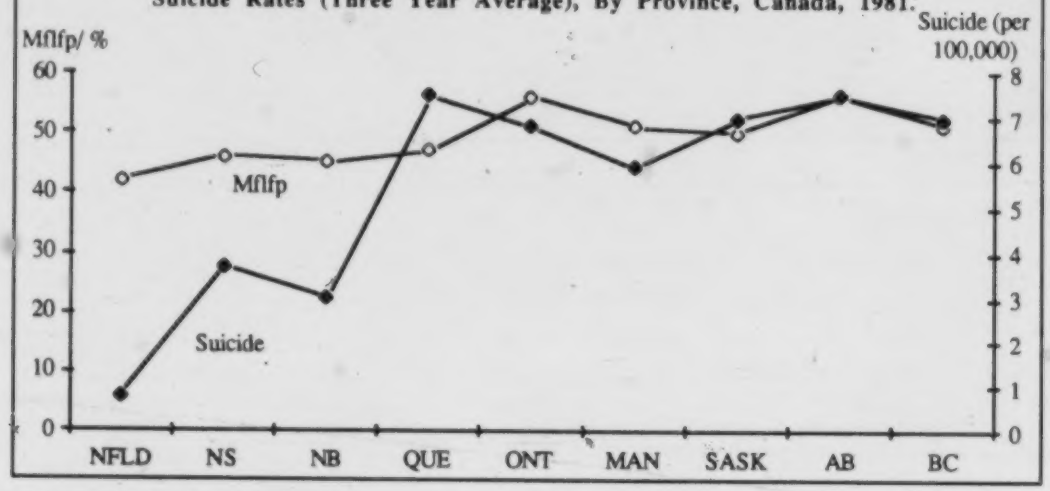
Source: See Tables A15 and A17

Chart 8: Married Female Labor Force Participation (Mflfp) and Suicide Rates (Three Year Average), By Province, Canada, 1971.



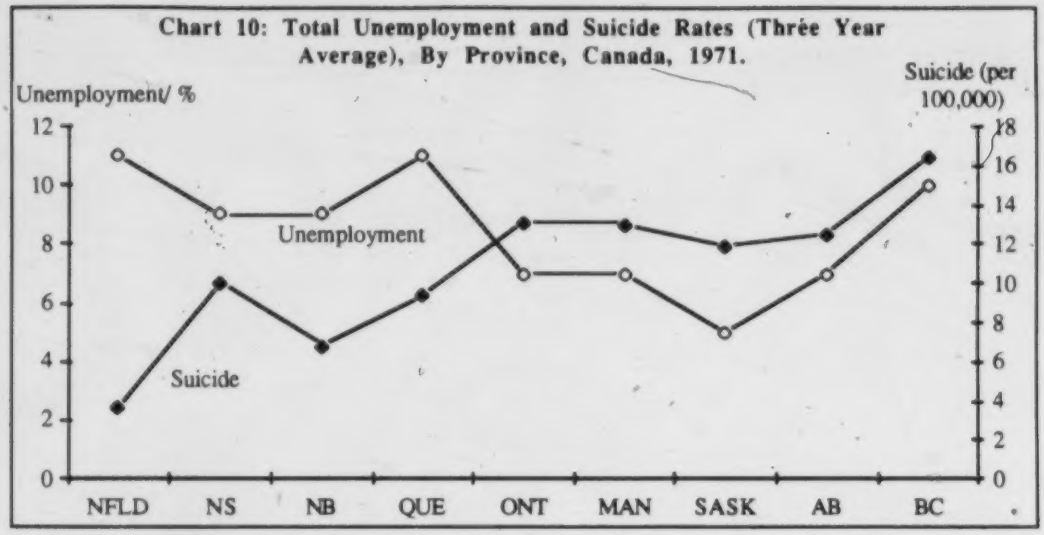
Source: See Tables A15 and A18

Chart 9: Married Female Labor Force Participation (Mflfp) and Suicide Rates (Three Year Average), By Province, Canada, 1981.



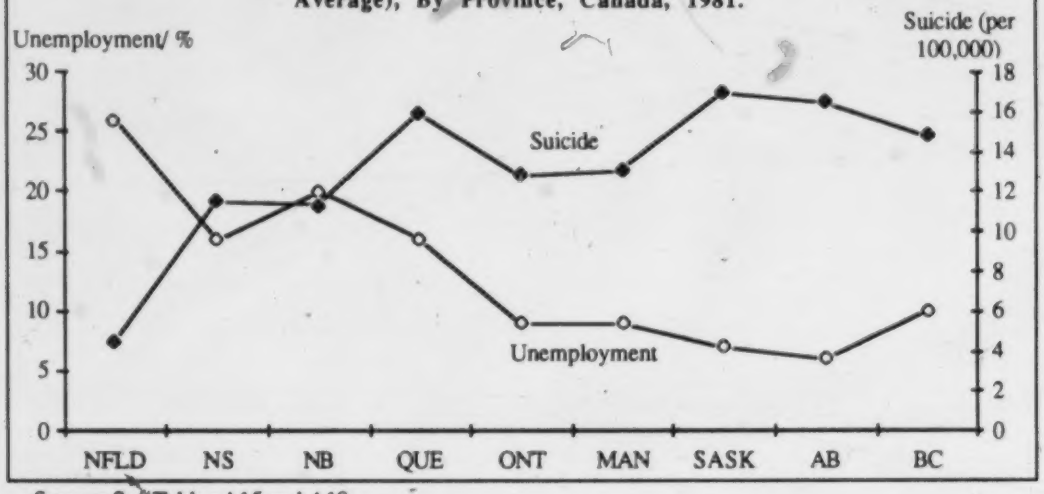
Source: See Tables A15 and A18

Chart 10: Total Unemployment and Suicide Rates (Three Year Average), By Province, Canada, 1971.



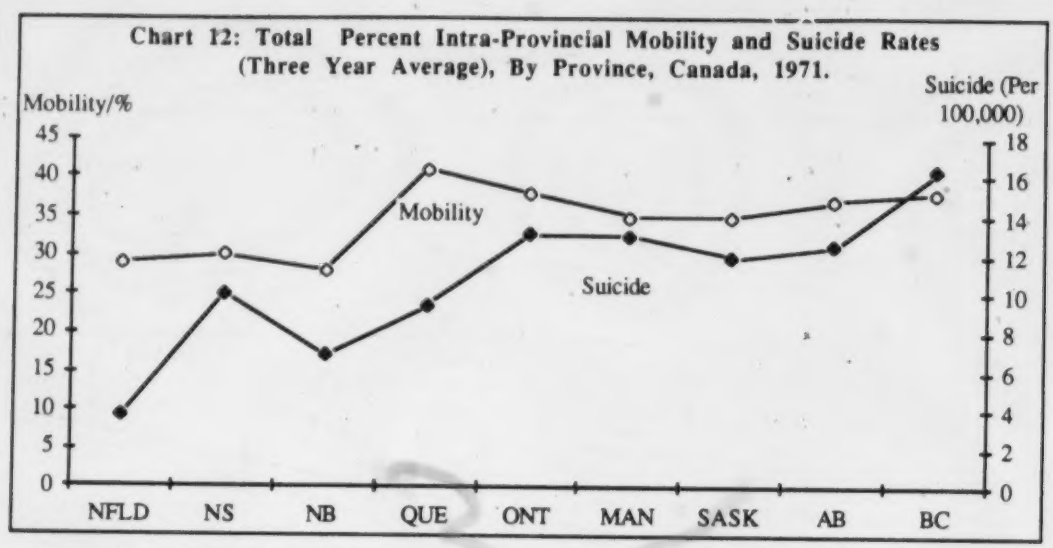
Source: See Tables A15 and A19

Chart 11: Total Unemployment and Suicide Rates (Three Year Average), By Province, Canada, 1981.



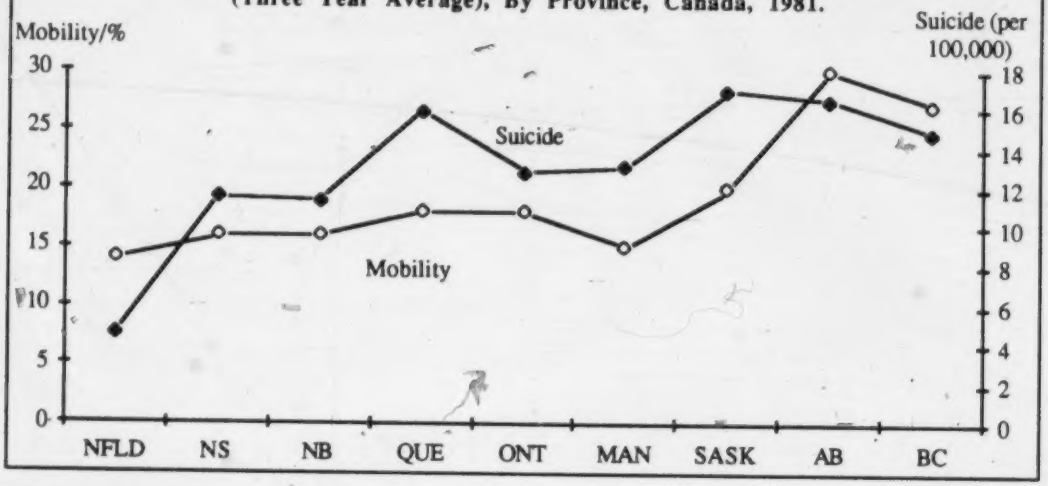
Source: See Tables A15 and A19

Chart 12: Total Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province, Canada, 1971.



Source: See Tables A15 and A20

Chart 13: Total Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A20

Table 6: Regression Coefficients for the Effects of Sex, Age and Time Dummy Independent Variables and the Other Independent Variables on the Suicide Rate (three year average).

Variable	b	SEb	Beta	t
Sex	-17.218177	.699648	-.755510	-24.610***
AGE				
15-19	-10.411392	2.669815	-.287140	-3.900***
20-24	-10.819031	2.695956	-.298383	-4.013***
25-29	-13.502901	2.553074	-.372402	-5.289***
30-34	-11.792247	2.224637	-.325224	-5.301***
35-39	-9.620444	2.003030	-.265326	-4.803***
40-44	-8.561142	1.979487	-.236112	-4.325***
45-49	-4.139524	1.831296	-.113918	-2.256*
50-54	-2.531311	1.723525	-.069812	-1.469
Time	-.655824	1.529957	-.028777	-.215
Norelig	.190840	.089149	.092283	1.071
Divorce	.002219	.001504	.093743	.738
Mflfp	.173550	.046692	.238195	1.859*
Unemploy	-.080236	.048378	-.087967	-.830
Mobility	.131436	.063372	.163949	1.037
(Constant)	20.354056	1.923406		10.582***

R^2 total=.74417 F=59.728***, df=15/308

age sex=.66381

others=.08036

adj R^2 total=.73171

*** ≤ .001

* ≤ .05

Table 7: Regression Coefficients for the Effects of Regional Variables on the Logit of the 1971 Suicide Rate for 15-19 Year Olds.

Variable	b	SEb	Beta	t
Atlantic	-.979194	.032606	-.496167	-15.015***
Quebec	-.222126	.032544	-.112998	-3.413***
Ontario	-.057268	.032195	-.029792	-.889
ManSask	.035520	.034249	.016317	.519
Alberta	.562202	.037794	.216326	7.438***
(Constant)	-9.532326	.026037		-183.053***

R^2=.31969 F=515.70***, df=5/5487

adjR^2=.31907

*** ≤ .001

Table 8: Regression Coefficients for the Effects of the Regional Variables on the Logit of the 1981 Suicide Rate for 15-19 Year Olds.

Variable	b	SEb	Beta	t
Atlantic	-2.440356	.128815	-.339345	-9.473***
Quebec	-.065559	.129497	-.009021	-.253
Ontario	-.165508	.126230	-.023973	-.656
ManSask	.479620	.136031	.060051	1.763*
Alberta	.455630	.145816	.050438	1.563
(Constant)	-9.386631	.101608		-46.191***

R^2=.13131 F=173.635***, df=5/5743

adjR^2=.13055

*** ≤ .001

* ≤ .05

Table 9: Correlation Matrix of the Variables Used in the Analysis for 15-19 Year Olds in 1971.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
Lsui	1.000					
Norelig	.385	1.000				
Divorce	-.134	.217	1.000			
Mflfp	.231	-.004	.047	1.000		
Unemploy	-.223	-.360	-.239	-.450	1.000	
Mobility	-.036	.350	.530	.264	-.198	1.000
Sex	-.718	-.145	.535	-.006	.016	.548
Atlantic	-.500	-.372	-.158	-.225	.157	-.655
Quebec	-.019	-.434	-.264	-.402	.776	-.044
Ontario	.089	-.003	-.033	.632	-.226	.248
ManSask	.124	-.039	-.082	.304	-.518	.104
Alberta	.324	.215	.602	-.056	-.296	.214

Table 9: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	[illegible]sk	Alberta
Sex	1.000					
Atlantic	.001	1.000				
Quebec	.002	-.255	1.000			
Ontario	-.002	-.265	-.267	1.000		
ManSask	-.001	-.218	-.219	-.228	[illegible]	
Alberta	.003	-.171	-.173	-.179	-.147	1.000

Table 10: Correlation Matrix of the Variables Used in the Analysis for 15-19 Year Olds in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.222	1.000				
Divorce	-.033	.109	1.000			
Mflfp	.501	.092	.088	1.000		
Unemploy	-.432	-.683	-.222	-.362	1.000	
Mobility	.160	.655	.512	.162	-.694	1.000
Sex	-.454	-.100	.675	.005	.102	.167
Atlantic	-.352	-.382	-.015	-.650	.706	-.401
Quebec	.059	-.456	-.181	.471	.422	-.300
Ontario	.045	-.030	-.120	.198	-.229	-.203
ManSask	.131	-.018	-.056	-.116	-.344	-.020
Alberta	.108	.231	.475	.118	-.446	.791

Table 10: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	.004	1.000				
Quebec	.000	-.152	1.000			
Ontario	-.006	-.178	-.211	1.000		
ManSask	.000	-.175	-.207	-.243	1.000	
Alberta	.003	-.191	-.226	-.266	-.261	1.000

Table 11: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	.104518	.002827	.496341	18.487***
Divorce	-.006467	6.4627E-04	-.139929	-5.003***
Mflfp	.035941	.001654	.302484	10.867***
Unemploy	.001474	.001281	.016627	.758
Mobility	-.036999	.002610	-.212192	-7.089***
(Constant)	-10.308088	.096923		-53.177***

R^2=.28353 F=434.279***, df=5/5487

adjR^2=.28287

*** ≤ .001

Table 12: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.010580	.007804	.022346	.678
Divorce	-.013492	.002271	-.078856	-2.970**
Mflfp	.151860	.004634	.385270	16.386***
Unemploy	-.058156	.002574	-.402635	-11.975***
Mobility	-.086422	.010609	-.155999	-4.073***
(Constant)	-15.115354	.417214		-18.115***

R^2=.34924 F=616.460***, df=5/5743

adjR^2=.34867

*** ≤ .001

** ≤ .01

Table 13: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.014715	.001937	.069888	3.799***
Divorce	.008822	4.2013E-04	.190897	10.499***
Mflfp	.013889	.001023	.116890	6.7875***
Unemploy	-.001187	7.7346E-04	-.013395	-.768
Mobility	.061771	.001871	.354262	16.510***
Sex	-1.591095	.016256	-1.003547	-48.940***
(Constant)	-11.414956	.059574		-95.805***

R^2=.73911 F=2590.469***, df=6/5486

adjR^2=.73883

*** ≤ .001

Table 14: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.024809	.006251	.052397	1.984*
Divorce	.078345	.002434	.457899	16.096***
Mflfp	.163396	.003715	.414537	21.993***
Unemploy	-.031422	.002113	-.217545	-7.340***
Mobility	-.115927	.068507	-.209258	-6.8135***
Sex	-4.030828	.071012	-.702527	-28.382***
(Constant)	-15.924406	.334256		-23.821***

R^2=.58313 F=1338.816***, df=6/5742

adjR^2=.58270

*** ≤ .001

* ≤.05

Table 15: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.033944	.002049	.161196	8.282***
Divorce	.001988	4.4391E-04	.043010	2.239*
Mflfp	.025885	9.3080E-04	.217853	13.905***
Unemploy	5.07185E-04	.001119	.005722	.227
Mobility	-.026149	.002066	-.149969	-6.329***
Sex	-1.007026	.015397	-.635159	-32.702***
Atlantic	-.829423	.028262	-.420277	-14.674***
Quebec	.149358	.035266	.075980	2.118*
Alberta	.655023	.020451	.252041	16.014***
(Constant)	-9.469072	.065224		-72.589***

R^2=.85719 F=3656.972***, df=9/5483

adjR^2=.85696

*** ≤ .001

* ≤ .05

Table 16: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 15-19 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.076021	.006570	.160560	5.786***
Divorce	.084886	.002712	.496130	15.653***
Mflfp	.208522	.004912	.529022	21.228***
Unemploy	.005457	.003273	.037779	.834
Mobility	-.062257	.008577	-.112379	-3.630***
Sex	-4.361494	.078751	-.760158	-27.692***
Atlantic	.251177	.120933	.034928	1.039
ManSask	1.927676	.090415	.241355	10.660***
(Constant)	-21.830843	.435486		-25.065***

R^2=.61408 F=1141.774***, df=8/5740

adjR^2=.61354

*** ≤ .001

Table 17: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1971.

Variable	b	SEb	Beta	t
Atlantic	-2.332851	.075526	-.421263	-15.444***
Quebec	-.412676	.074448	-.076695	-2.772**
Ontario	-.356115	.073134	-.068624	-2.435**
ManSask	-.453215	.079097	-.074875	-2.865**
Alberta	-.325416	.086564	-.045878	-1.880*
(Constant)	-8.625329	.059209		-72.839**

R^2=.13409 F=302.825***, df=5/9778

adjR^2=.13364

*** ≤ .001

** ≤ .01

* ≤ .05

Table 18: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1981.

Variable	b	SEb	Beta	t
Atlantic	-2.159486	.071309	-.376050	-15.142***
Quebec	.078095	.070615	.013859	.553
Ontario	-.291794	.069230	-.053832	-2.108*
ManSask	.158714	.074958	.025182	1.059
Alberta	-.071673	.077852	-.010637	-.461
(Constant)	-8.715823	.055208		-78.937***

R^2=.14055 F=370.089***, df=5/11315

adjR^2=.14017

*** ≤ .001

** ≤ .05

Table 19: Correlation Matrix of the Variables Used for the Analysis of 20-29 Year Olds in 1971.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.324	1.000				
Divorce	.133	.454	1.000			
Mflfp	.275	.400	.026	1.000		
Unemploy	-.033	-.147	-.467	.057	1.000	
Mobility	-.195	-.227	.292	-.162	-.472	1.000
Sex	-.407	-.307	.250	.000	-.033	.450
Atlantic	-.361	-.375	-.313	-.469	.100	-.381
Quebec	.070	-.423	-.382	-.363	.338	.300
Ontario	.089	.031	.084	.493	-.158	.092
ManSask	.051	-.039	[illegible]	.141	-.250	.131
Alberta	.061	.189	.467	.163	-.170	-.055

Table 19: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	.002	1.000				
Quebec	.000	-.247	1.000			
Ontario	.001	-.263	-.276	1.000		
ManSask	-.002	-.206	-.216	-.230	1.000	
Alberta	-.002	-.166	-.174	-.186	-.145	1.000

Table 20: Correlation Matrix of the Variables Used in the Analysis of 20-29 Year Olds in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.217	1.000				
Divorce	-.105	.265	1.000			
Mflfp	.159	.077	-.433	1.000		
Unemploy	-.191	-.529	-.530	-.150	1.000	
Mobility	-.006	.589	.598	-.227	-.649	1.000
Sex	-.468	-.212	.323	.001	.092	.194
Atlantic	-.39	-.381	-.171	-.508	.615	-.370
Quebec	.114	-.464	-.092	.041	.327	-.231
Ontario	.034	-.018	-.054	.502	-.257	-.208
ManSask	.111	-.028	-.043	.002	-.290	-.027
Alberta	.062	.247	.264	-.018	-.385	.634

Table 20: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	.004	1.000				
Quebec	.000	-.237	1.000			
Ontario	.003	-.253	-.261	1.000		
ManSask	-.001	-.200	-.206	-.220	1.000	
Alberta	-.009	-.182	-.188	-.201	-.158	1.000

Table 21: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	.083545	.005449	.193643	7.667***
Divorce	7.6869E-04	7.1272E-05	.133012	5.393***
Mflfp	.044224	.002681	.170193	8.249***
Unemploy	.075967	.006390	.136618	5.944***
Mobility	-.027286	.003239	-.098244	-4.212***
(Constant)	-11.450453	.239990		-23.856***

R^2=.16036 F=373.488***, df=5/9778

adjR^2=.15993

*** ≤ .001

Table 22: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.071428	.003284	.247834	10.874***
Divorce	-.001014	5.4791E-05	-.246205	-9.253***
Mflfp	-.031716	.004366	-.084296	-3.633***
Unemploy	-.110318	.004163	-.378801	-13.251***
Mobility	-.074312	.003940	-.270137	-9.431***
(Constant)	-2.781208	.402284		-3.457***

R^2=.14035 F=369.457***, df=5/11315

adjR^2=.13997

*** ≤ .001

Table 23: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	-.043246	.005321	-.100236	-4.064***
Divorce	.002458	6.9854E-05	.425349	17.595***
Mflfp	.079199	.002438	.304790	16.242***
Unemploy	.168570	.005859	.303154	14.385***
Mobility	.031521	.003041	.113492	5.183***
Sex	-2.543320	.046944	-.584795	-27.089***
(Constant)	-15.876602	.225777		-35.160***

R^2=.35423 F=893.848***, df=6/9777

adjR^2=.35384

*** ≤ .001

Table 24: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.008015	.003353	.027811	1.195
Divorce	4.6971E-04	6.0667E-05	.114053	3.871***
Mflfp	.083019	.004791	.220655	8.664***
Unemploy	5.9821E-04	.004587	.002054	.065
Mobility	.016282	.004173	.059187	1.951*
Sex	-2.285220	.051591	-.510576	-22.148***
(Constant)	-14.520593	.456254		-15.913***

R^2=.26739 F=688.246***, df=6/11314

adjR^2=.26700

*** ≤ .001

* ≤ .05

Table 25: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	.275560	.018836	.638706	7.315***
Divorce	.005247	9.2567E-05	.908006	28.344***
Mflfp	.130209	.004287	.501095	15.187***
Unemploy	.122494	.007941	.220291	7.713***
Mobility	-.056897	.003876	-.204857	-7.351***
Sex	-1.47524	.066648	-.339319	-11.071***
Atlantic	6.064378	.291172	1.095098	10.414***
Quebec	8.389721	.283152	1.559221	14.815***
Ontario	3.928130	.230657	.756961	8.515***
ManSask	5.389165	.244027	.890339	11.042***
Alberta	1.302350	.184572	.183607	3.528***
(Constant)	-21.645168	.505395		-21.414***

R^2=.50369 F=901.565***, df=11/9772

adjR^2=.50313

*** ≤ .001

Table 26: Regression Coefficients for Table 25 Minus the Atlantic Regional Variable.

Variable	b	SEb	Beta	t
Norelig	-.091384	.006808	-.211813	-6.711***
Divorce	.004577	8.8693E-05	.792012	25.803***
Mflfp	.145083	.004319	.558336	16.794***
Unemploy	.024798	.006548	.044597	1.894*
Mobility	-.079574	.003795	-.286508	-10.484***
Sex	-2.346404	.053044	-.539517	-22.118***
Quebec	2.667008	.069891	.495661	19.080***
Ontario	-.564984	.083417	-.108874	-3.387***
ManSask	.532877	.073563	.088036	3.622***
Alberta	-2.057115	.091684	-.290015	-11.219***
(Constant)	-12.532321	.258489		-24.242***

R^2=.48166 F=908.128***, df=10/9773

adjR^2=.48113

*** ≤ .001

* ≤ .05

Table 27: Regression Coefficients for Table 25 Minus the Quebec Regional Variable.

Variable	b	SEb	Beta	t
Norelig	-.243698	.007207	-.564855	-16.906***
Divorce	.004272	9.0315E-05	.739234	23.651***
Mflfp	.154695	.004391	.595327	17.615***
Unemploy	.006325	.007209	.011375	.439
Mobility	-.070131	.004013	-.252508	-8.738***
Sex	-2.830358	.050624	-.650795	-27.955***
Atlantic	-2.307530	.073418	-.416691	-15.715***
Ontario	-2.492270	.082524	-.480267	-15.101***
ManSask	-1.526218	.074380	-.252145	-10.260***
Alberta	-3.423076	.096990	-.482590	-17.646***
(Constant)	-10.022816	.332679		-15.064***

R^2=.45910 F=829.499***, df=10/9773

adjR^2=.45855

*** ≤ .001

Table 28: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 20-29 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.012025	.003111	.041725	1.933*
Divorce	1.62686E-04	5.7104E-05	.039503	1.425
Mflfp	-.021128	.005402	-.056157	-1.956*
Unemploy	.031910	.004626	.109570	3.449***
Mobility	-.027120	.004211	-.098587	-3.220***
Sex	-2.062449	.048312	-.460804	-21.345***
Atlantic	-2.810278	.067201	-.489380	-20.910***
Ontario	-.267532	.053344	-.049360	-2.508**
(Constant)	-5.977078	.470871		-6.347***

R^2=.37005 F=830.635***, df=8/11312

adjR^2=.36961

*** ≤ .001

** ≤ .01

* ≤ .05

Table 29: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1971.

Variable	b	SEb	Beta	t
Atlantic	-1.959472	.053533	-.382183	-18.302***
Quebec	-.584863	.052527	-.188409	-5.567***
Ontario	-.230145	.051287	-.048887	-2.244*
ManSask	-.339307	.055546	-.061698	-3.055**
Alberta	-.300396	.061223	-.046111	-2.454**
(Constant)	-8.338264	.041533		-100.381***

R^2=.11029 F=414.610***, df=5/6724

adjR^2=.11002

*** ≤ .001

** ≤ .01

* ≤ .05

Table 30: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1981.

Variable	b	SEb	Beta	t
Atlantic	-1.228673	.040536	-.296056	-15.156***
Quebec	.275216	.039945	.068185	3.445***
Ontario	-3.233E-04	.038937	-8.414E-05	-.004
ManSask	-.160747	.042862	-.034997	-1.875*
Alberta	.295133	.045617	.057823	3.235***
(Constant)	-8.829195	.031108		-141.913**

R^2=.10841 F=450.274***, df=5/18316

adjR^2=.10817

*** ≤ .001

* ≤ .05

Table 31: Correlation Matrix of the Variables Used in the Analysis of 30-49 Year Olds in 1971.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.268	1.000				
Divorce	.285	.808	1.000			
Mflfp	.285	.402	.489	1.000		
Unemploy	.070	-.048	-.012	-.349	1.000	
Mobility	.175	.306	.501	-.067	.074	1.000
Sex	-.337	-.328	-.086	-.003	.194	-.212
Atlantic	-.321	-.345	-.476	-.492	.087	-.404
Quebec	.008	-.410	-.341	-.589	.299	.242
Ontario	.107	.014	.191	.526	-.133	.131
ManSask	.060	-.050	-.138	.241	-.394	-.052
Alberta	.054	.171	.392	.317	-.170	-.062

Table 31: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	.001	1.000				
Quebec	.004	-.240	1.000			
Ontario	.001	-.261	-.278	1.000		
ManSask	-.001	-.203	-.216	-.235	1.000	
Alberta	-.003	-.162	-.172	-.187	-.146	1.000

Table 32: Correlation Matrix of the Variables Used in the Analysis of 30-49 Year Olds in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.212	1.000				
Divorce	.292	.546	1.000			
Mflfp	.152	.486	.190	1.000		
Unemploy	-.451	-.455	-.303	-.669	1.000	
Mobility	.165	.659	.840	.285	-.269	1.000
Sex	-.438	-.279	-.203	-.002	.356	-.124
Atlantic	-.315	-.351	-.363	-.543	.659	-.277
Quebec	-.136	-.425	.204	-.523	.233	-.125
Ontario	.055	-.008	-.144	.509	-.276	-.112
ManSask	.001	-.037	-.206	.240	-.285	-.127
Alberta	.101	.181	.294	.209	-.345	.379

Table 32 Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	-.002	1.000				
Quebec	.003	-.238	1.000			
Ontario	.003	-.260	-.272	1.000		
ManSask	.000	-.196	-.205	-.223	1.000	
Alberta	-.005	-.170	-.178	-.194	-.146	1.000

Table 33: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	.085423	.005919	.178101	7.217***
Divorce	-9.3167E-04	1.1419E-04	-.126789	-4.080***
Mflfp	.080789	.002228	.353897	18.134***
Unemploy	.160552	.006694	.186290	11.993***
Mobility	.041456	.001976	.194043	10.491***
(Constant)	-14.254828	.117023		-60.906***

R^2=.15960 F=635.211***, df=5/16724

adjR^2=.15935

*** ≤ .001

Table 34: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.010327	.002261	.042164	2.284*
Divorce	.001405	4.969E-05	.338894	14.135***
Mflfp	-.059206	.002284	-.232817	-12.625***
Unemploy	-.191590	.003119	-.546240	-30.710***
Mobility	-.045929	.002643	-.228002	-8.690***
(Constant)	-4.764053	.156505		-15.220***

R^2=.28122 F=1448.851***, df=5/18516

adjR^2=.28103

*** ≤ .001

* ≤ .05

Table 35: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	-.078348	.006325	-.163350	-6.194***
Divorce	.001383	1.1484E-04	.188211	6.022***
Mflfp	.080705	.002066	.353529	19.531***
Unemploy	.228354	.006343	.264962	18.000***
Mobility	.010057	.001929	.047076	2.607**
Sex	-1.648005	.031614	-.414532	-26.064***
(Constant)	-13.288788	.110110		-60.343***

R^2=.27707 F=1068.216***, df=6/16723

adjR^2=.27681

*** ≤ .001

** ≤ .01

Table 36: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	-.012228	.002258	-.049925	-2.708**
Divorce	.001277	4.799E-05	.308005	13.302***
Mflfp	-.025023	.002378	-.098398	-5.262***
Unemploy	-.139185	.003308	-.396828	-21.040***
Mobility	-.034851	.002563	-.173005	-6.800***
Sex	-.870863	.022971	-.269890	-18.956***
(Constant)	-6.6636561	.158876		-20.972***

R^2=.33300 F=1540.570***, df=8/18515

adjR^2=.33278

*** ≤ .001

** ≤ .01

Table 37: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1971.

Variable	b	SEb	Beta	t
Norelig	-.191981	.014295	-.400267	-6.715***
Divorce	.003919	1.4365E-04	.533328	13.641***
Mflfp	.119424	.003826	.523136	15.607***
Unemploy	.192712	.007228	.223606	13.331***
Mobility	-.023398	.002367	-.109522	-4.943***
Sex	-1.941911	.041924	-.488459	-23.160***
Atlantic	-.387366	.150551	-.075553	-1.287
Quebec	.821130	.159724	.166243	2.571**
Ontario	-1.136897	.125158	-.241495	-4.542
ManSask	-.020075	.129891	-.003650	-.078
Alberta	-1.641344	.115049	-.251950	-7.133***
(Constant)	-13.890285	.253785		-27.367***

R^2=.34077 F=785.617***, df=11/16718

adjR^2=.34034

*** ≤ .001

** ≤ .01

Table 38: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for 30-49 Year Olds in 1981.

Variable	b	SEb	Beta	t
Norelig	.002284	.003265	.009325	.350
Divorce	4.1410E-04	7.073E-05	.099903	2.928***
Mflfp	-.004916	.003495	-.019330	-.703
Unemploy	-.147441	.004624	-.420367	-15.944***
Mobility	-.007376	.002983	-.036616	-1.237
Sex	-.874295	.026157	-.270953	-16.713***
Atlantic	.026035	.072656	.006273	.179
Quebec	.749646	.079721	.185724	4.702***
ManSask	-.294308	.033093	-.064075	-4.447***
Alberta	-.172815	.038918	-.033858	-2.221*
(Constant)	-7.575071	.226575		-16.717***

R^2=.35022 F=997.714***, df=10/18511

adjR^2=.34987

*** ≤ .001

** ≤ .01

* ≤ .05

Table 39: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1971.

Variable	b	SEb	Beta	t
Atlantic	-1.083008	.022744	-.563000	-23.809***
Quebec	-.811982	.022815	-.419586	-17.795***
Ontario	-.141763	.022064	-.078202	-3.213***
ManSask	-.506604	.023384	-.249844	-10.832***
Alberta	-.679012	.026755	-.265758	-12.690***
(Constant)	-8.244657	.017689		-233.041***

R^2=.25272 F=738.925***, df=5/10925

adjR^2=.25237

*** ≤ .001

Table 40: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1981.

Variable	b	SEb	Beta	t
Atlantic	-1.253177	.050663	-.298777	-12.368***
Quebec	-.062231	.050266	-.015061	-.619
Ontario	-.058088	.048528	-.015055	-.599
ManSask	-.239493	.050197	-.058113	-2.386**
Alberta	.078423	.058384	.014616	.672
(Constant)	-8.569336	.038814		-110.390***

R^2=.08210 F=223.769***, df=5/12510

adjR^2=.08173

*** ≤ .001

** ≤ .01

Table 41: Correlation Matrix of the variables Used in the Analysis of Those Aged 50 and Over in 1971.

	Lsui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.606	1.000				
Divorce	.536	.646	1.000			
Mflfp	.304	.294	.784	1.000		
Unemploy	.128	.114	-.168	-.346	1.000	
Mobility	.196	.315	.322	.103	.449	1.000
Sex	-.786	-.379	-.279	-.004	-.028	.159
Atlantic	-.346	-.313	-.337	-.237	-.248	-.196
Quebec	-.170	-.392	-.215	-.379	.482	.394
Ontario	.288	-.064	.099	.221	-.152	.185
ManSask	.023	-.023	-.045	.251	-.312	-.180
Alberta	-.058	.189	.281	.193	-.070	.071

Table 41: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	-.009	1.000				
Quebec	.007	-.236	1.000			
Ontario	.008	-.264	-.262	1.000		
ManSask	-.003	-.220	-.217	-.243	1.000	
Alberta	-.004	-.161	-.159	-.178	-.148	1.000

Table 42: Correlation Matrix of the Variables Used in the Analysis of Those Aged 50 and Over in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.241	1.000				
Divorce	.262	.379	1.000			
Mflfp	.058	.326	.777	1.000		
Unemploy	-.389	-.370	-.066	-.221	1.000	
Mobility	.225	.852	.442	.319	-.260	1.000
Sex	-.415	-.339	-.347	-.026	.178	-.079
Atlantic	-.281	-.317	-.206	-.192	.553	-.452
Quebec	.066	-.403	.228	-.190	.438	-.107
Ontario	.076	-.019	-.047	.169	-.287	-.017
ManSask	.014	-.078	-.222	.053	-.395	-.290
Alberta	.075	.182	.171	.159	-.402	.223

Table 42: Correlation Matrix Continued.

	Sex	Atlantic	Quebec	Ontario	ManSask	Alberta
Sex	1.000					
Atlantic	-.004	1.000				
Quebec	.001	-.223	1.000			
Ontario	-.004	-.250	-.256	1.000		
ManSask	.022	-.224	-.229	-.257	1.000	
Alberta	-.011	-.155	-.159	-.178	-.159	1.000

Table 43: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1971.

Variable	b	SEb	Beta	t
Norelig	.098313	.002765	.382167	17.779***
Divorce	.001823	7.9533E-05	.391304	11.461***
Mflfp	-.002122	9.2007E-04	-.031211	-1.154
Unemploy	.079699	.003625	.201016	10.995***
Mobility	-.022683	.001505	-.137095	-7.537***
(Constant)	-9.308904	-.037789		-123.170***

R^2=.43049 F=1651.632***, df=5/10925

adjR^2=.43023

*** ≤ .001

Table 44: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1981.

Variable	b	SEb	Beta	t
Norelig	.013377	.006293	.031290	1.063
Divorce	.005166	9.6501E-05	.683197	26.768***
Mflfp	-.063932	.001364	-.573213	-23.440***
Unemploy	-.255995	.004487	-.470361	-28.529***
Mobility	-.020803	.007165	-.042592	-1.452
(Constant)	-6.645223	.065839		-50.466***

R^2=.32674 F=1214.199***, df=5/12510

adjR^2=.32647

*** ≤ .001

Table 45: Regression Coefficients for the Effects of the Social integration and Sex Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1971.

Variable	b	SEb	Beta	t
Norelig	.065250	.001523	.253645	21.425***
Divorce	-.001127	4.7132E-05	-.241854	-11.954***
Mflfp	.028203	5.3646E-04	.414782	26.287***
Unemploy	.027475	.002004	.069297	6.854***
Mobility	.040774	9.1142E-04	.246432	22.368***
Sex	-1.202621	.007493	-.792695	-80.254***
(Constant)	-10.075300	.021167		-237.994***

R^2=.83042 F=8915.681***, df=6/10924

adjR^2=.83033

*** ≤ .001

Table 46: Regression Coefficients for the Effects of the Social Integration and Sex Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1981.

Variable	b	SEb	Beta	t
Norelig	-.117683	.008222	-.275281	-7.156***
Divorce	.002829	1.3551E-04	.374102	10.438***
Mflfp	-.036576	.001753	-.327889	-10.429***
Unemploy	-.227119	.004548	-.417305	-24.968***
Mobility	.130709	.009425	.267609	6.934***
Sex	-.937514	.039015	-.29491	-12.015***
(Constant)	-7.416144	.071924		-51.555

R^2=.35645 F=1154.692***, df=6/12509

adjR^2=.35614

*** ≤ .001

Table 47: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1971.

Variable	b	SEb	Beta	t
Norelig	-.058513	.002695	-.227456	-10.855***
Divorce	7.8453E-04	4.5612E-05	.168396	8.600***
Mflfp	.008202	5.4281E-04	.120624	7.555***
Unemploy	.074440	.001688	.187752	22.053***
Mobility	.006277	.001194	.037938	2.630**
Sex	-1.255625	.007549	-.827632	-83.161***
Atlantic	-1.042861	.023423	-.542129	-22.262***
Quebec	-1.068853	.021591	-.552315	-24.752***
Ontario	-.273369	.018001	-.150802	-7.593***
ManSask	-.537149	.019568	-.264908	-13.725***
Alberta	-.816300	.014784	-.319491	-27.608***
(Constant)	-8.293915	.039966		-103.763***

R^2=.92094 F=11563.722***, df=11/10919

adjR^2=.92087

*** ≤ .001

** ≤ .01

Table 48: Regression Coefficients for the Effects of the Social Integration, Sex and Regional Variables on the Logit of the Suicide Rate for Those Aged 50 and Over in 1981.

Variable	b	SEb	Beta	t
Norelig	-.122015	.008957	-.285414	-6.811***
Divorce	.002868	1.3779E-04	.379214	10.405***
Mflfp	-.037138	.001786	-.332981	-10.399***
Unemploy	-.223042	.005618	-.409814	-19.852***
Mobility	.138641	.011216	.283849	6.181***
Sex	-.944899	.039163	-.293787	-12.064***
Atlantic	.005135	.045052	.001224	.057
ManSask	.084206	.041210	.020433	1.022
(Constant)	-7.50821	.088065		-42.633***

R^2=.35668 F=866.777***, df=8/12507

adjR^2=.35627

*** ≤ .001

Table 49: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Males in 1971.

Variable	b	SEb	Beta	t
Atlantic	-.647762	.010486	-.531996	-30.886***
Quebec	-.357452	.010399	-.298438	-17.187***
Ontario	-.144630	.010154	-.126649	-7.121***
ManSask	-.064651	.010893	-.049365	-2.968***
Alberta	-.024311	.012090	-.015477	-1.006
(Constant)	-8.173659	.008189		-499.01***

R^2=.23262 F=1221.419***, df=5/21462

adjR^2=.23244

*** ≤ .001

Table 50: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Males in 1981.

Variable	b	SEb	Beta	t
Atlantic	-.376601	.007459	-.399990	-25.244***
Quebec	.105107	.007400	.113351	7.102***
Ontario	-.178695	.007204	-.203034	-12.403***
ManSask	.038258	.007762	.037734	2.465*
Alberta	.149931	.008348	.130365	8.98***
(Constant)	-8.173634	.005753		-710.442***

R^2=.25354 F=1622.048***, df=5/23877

adjR^2=.25339

*** ≤ .001

* ≤ .05

Table 51: Correlation Matrix of the Variables Used in the Analysis of the Logit of the Suicide Rate for Males in 1971.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.342	1.000				
Divorce	.410	.573	1.000			
Mflfp	.221	.432	.374	1.000		
Unemploy	-.651	-.149	-.558	-.083	1.000	
Mobility	.052	.319	.489	.350	-.183	1.000
Atlantic	-.414	-.362	-.279	-.316	.098	-.280
Quebec	-.122	-.435	-.218	-.362	.228	.175
Ontario	.108	.012	.102	.357	-.116	.090
ManSask	.159	-.034	-.072	.177	-.166	-.048
Alberta	.153	.199	.279	.175	-.104	-.001
15-19	-.601	-.100	-.478	-.010	.841	-.275
20-29	-.047	.229	.032	.365	.016	.632
30-49	.208	.049	.537	.154	-.383	.134

Table 51. Correlation Matrix Continued.

	Atlantic	Quebec	Ontario	ManSask	Alberta	15-19	20-29	30-49
Atlantic	1.000							
Quebec	-.242	1.000						
Ontario	-.263	-.270	1.000					
ManSask	-.210	-.216	-.235	1.000				
Alberta	-.165	-.169	-.184	-.147	1.000			
15-19	.011	.005	-.008	-.001	.000	1.000		
20-29	-.001	.009	.000	-.008	.004	-.209	1.000	
30-49	-.014	.005	.010	-.008	.004	-.309	-.436	1.000

Table 52: Correlation Matrix of the Variables Used in the Analysis of the Logit of the Suicide Rate for Males in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.157	1.000				
Divorce	.171	.391	1.000			
Mflfp	-.016	.370	.328	1.000		
Unemploy	-.390	-.252	-.496	.160	1.000	
Mobility	.236	.655	.574	.566	-.163	1.000
Atlantic	-.405	-.345	-.153	-.195	.322	-.215
Quebec	.230	-.442	.067	-.081	.146	-.101
Ontario	-.164	-.013	-.047	.162	-.121	-.083
ManSask	.122	-.033	-.107	.012	-.145	-.123
Alberta	.213	.220	.154	.090	-.171	.349
15-19	-.272	-.064	-.485	.177	.776	-.173
20-29	.201	.196	-.008	.394	.061	.597
30-49	-.106	.115	.677	.269	-.346	.109

Table 52. Correlation Matrix Continued.

	Atlantic	Quebec	Ontario	ManSask	Alberta	15-19	20-29	30-49
Atlantic	1.000							
Quebec	-.235	1.000						
Ontario	-.257	-.263	1.000					
ManSask	-.205	-.210	-.229	1.000				
Alberta	-.172	-.177	-.193	-.154	1.000			
15-19	.014	-.001	-.002	-.002	-.003	1.000		
20-29	-.001	.003	-.009	-.010	.025	-.208	1.000	
30-49	.000	.009	.007	-.023	-.001	-.297	-.446	1.000

Table 53: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Males in 1971.

Variable	b	SEb	Beta	t
Norelig	.030179	6.1736E-04	.300286	24.442***
Divorce	-1.68496E-04	1.0880E-05	-.119308	-7.744***
Mflfp	.005816	2.3558E-04	.133829	12.343***
Unemploy	-.034944	2.9909E-04	-.690651	-58.416***
Mobility	-.006197	2.1521E-04	-.159483	-14.397***
(Constant)	-8.176707	.009666		-422.944***

R^2=.52463 F=4737.150***, df=5/21462

adjR^2=.52452

*** ≤ .001

Table 54: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Males in 1981.

Variable	b	SEb	Beta	t
Norelig	-.005327	3.9320E-04	-.105619	-6.774***
Divorce	-1.37225E-04	5.2589E-06	-.215950	-13.047***
Mflfp	-.001149	1.6522E-04	-.051999	-3.476***
Unemploy	-.011814	1.9264E-04	-.452461	-30.663***
Mobility	.013420	3.2905E-04	.384926	20.392***
(Constant)	-8.159505	.007282		-560.280***

R^2=.21452 F=1304.197***, df=5/23877

adjR^2=.21435

*** ≤ .001

Table 55: Regression Coefficients for the Effects of the Social Integration and Age Dummy Variables on the Logit of the Suicide Rate for Males in 1971.

Variable	b	SEb	Beta	t
Norelig	.034074	5.9722E-04	.339037	57.054***
Divorce	-3.57643E-04	1.2053E-05	-.253238	-14.836***
Mflfp	.016066	2.5876E-04	.369730	31.045***
Unemploy	-.010643	4.6770E-04	-.210349	-11.378***
Mobility	.005546	3.0990E-04	.142740	8.940***
15-19	-.992121	.014430	-.695637	-34.376***
20-29	-.708507	.011743	-.621629	-30.168***
30-49	-.308943	.007335	.315403	-21.059***
(Constant)	-8.737778	.012265		-356.20***

R^2=.61940 F=4365.337***, df=8/21459

adjR^2=.61926

*** ≤ .001

Table 56: Regression Coefficients for the Effects of the Social Integration and Age Dummy Variables on the Logit of the Suicide Rate for Males in 1981.

Variable	b	SEb	Beta	t
Norelig	-.006788	4.2709E-04	-.134597	-7.948***
Divorce	7.71622E-05	7.8252E-06	.121436	4.931***
Mflfp	.001364	2.3650E-04	.061758	2.884**
Unemploy	-.014567	2.8107E-04	-.557904	-25.914***
Mobility	.007487	5.1742E-04	.214761	7.236***
15-19	.126550	.016739	.112861	-3.780***
20-29	-.034725	.014535	-.040312	-1.195
30-49	-.292861	.009797	-.389540	-14.947***
(Constant)	-8.181805	.009429		-433.875***

R^2=.26908 F=1098.622***, df=8/23874

adjR^2=.26883

*** ≤ .001

** ≤ .01

Table 57: Regression Coefficients for the Effects of the Social Integration, Age and Regional Variables on the Logit of the Suicide Rate for Males in 1971.

Variable	b	SEb	Beta	t
Norelig	.026062	9.2025E-04	.259323	14.116***
Divorce	-2.87357E-04	1.1588E-05	-.203470	-12.399***
Mflfp	.012402	3.0425E-04	.285407	20.382***
Unemploy	-.015210	5.0139E-04	-.300622	-15.168***
Mobility	-.003907	3.4553E-04	-.100547	-5.654***
15-19	-.795655	.014394	-.557882	-27.639***
20-29	-.367488	.012836	-.322426	-14.314***
30-49	-.154689	.007783	-.157924	-9.938***
Atlantic	-.362383	.011522	-.297619	-15.726***
Quebec	.050925	.012829	.042517	1.985
Ontario	-.089248	.008510	-.078153	-5.244***
ManSask	-.036819	.009086	-.028114	-2.026*
(Constant)	-8.277336	.016583		-249.581***

R^2=.68111 F=3818.689***, df=12/21455

adjR^2=.68093

*** ≤ .001

* ≤ .05

Table 58: Regression Coefficients for the Effects of the Social Integration, Age and Regional Variables on the Logit of the Suicide Rate for Males in 1981.

Variable	b	SEb	Beta	t
Norelig	.008318	.001116	.164933	3.727***
Divorce	-1.23983E-05	7.9628E-06	-.019511	-.779
Mflfp	.001832	2.3249E-04	.082923	3.940***
Unemploy	-.013314	3.0341E-04	-.509908	-21.941***
Mobility	.001021	5.3290E-04	.029283	.958
15-19	.037427	.015670	.033378	1.194
20-29	.018255	.014605	.021193	.625
30-49	-.220726	.0099351	-.293591	-11.802***
Atlantic	-.027017	.020786	-.028695	-.650
Quebec	.391149	.023061	.421828	8.481***
Ontario	-.060199	.016379	-.068399	-1.838*
ManSask	.140207	.016566	.138290	4.232***
Alberta	.174040	.014360	.151328	6.060***
(Constant)	-8.285312	.021206		-195.349***

R^2=.42179 F=1339.379***, df=13/23869

adjR^2=.42147

*** ≤ .001

* ≤ .05

Table 59: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Females in 1971.

Variable	b	SEb	Beta	t
Atlantic	-2.765791	.049253	-.499577	-28.080***
Quebec	-.767543	.048667	-.141967	-7.890***
Ontario	-.286071	.047594	-.055345	-3.010***
ManSask	-.672263	.051186	-.112776	-6.567***
Alberta	-.584523	.056935	-.081424	-5.133***
(Constant)	-8.874338	.038489		-115.280***

R^2=.18385 F=966.985***, df=5/21464

adjR^2=.18365

*** ≤ .001

Table 60: Regression Coefficients for the Effects of the Regional Variables on the Logit of the Suicide Rate for Females in 1981.

Variable	b	SEb	Beta	t
Atlantic	-2.853217	.052373	-.443909	-27.240***
Quebec	.102890	.051823	.016335	.993
Ontario	-.022747	.050471	-.003803	-.226
ManSask	-.068773	.054026	-.010094	-.637
Alberta	.151978	.059096	.019087	1.286
(Constant)	-9.421668	.040404		-116.594***

R^2=.20138 F=1221.419***, df=5/24219

adjR^2=.20122

*** ≤ .001

Table 61: Correlation Matrix of the Variables Used in the Analysis of the Logit of the Suicide Rate for Females in 1971.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.223	1.000				
Divorce	.240	.608	1.000			
Mflfp	.184	.428	.523	1.000		
Unemploy	-.051	.084	-.330	.054	1.000	
Mobility	-.032	.352	.475	.438	.039	1.000
Atlantic	-.414	-.347	-.266	-.308	-.031	-.267
Quebec	.033	-.381	-.228	-.364	.154	.135
Ontario	.156	-.008	.094	.351	-.028	.071
ManSask	.047	-.062	-.062	.178	-.126	.007
Alberta	.050	.173	.278	.176	-.039	-.005
15-19	-.090	.019	-.441	-.007	.909	-.139
20-29	-.110	.241	.319	.368	-.014	.835
30-49	.057	.015	.403	.157	-.354	-.174

Table 61. Correlation Matrix Continued.

	Atlantic	Quebec	Ontario	ManSask	Alberta	15-19	20-29	30-49
Atlantic	1.000							
Quebec	-.243	1.000						
Ontario	-.263	-.274	1.000					
ManSask	-.209	-.217	-.235	1.000				
Alberta	-.163	-.169	-.183	-.145	1.000			
15-19	.013	.003	-.011	.000	.004	1.000		
20-29	002	.005	-.001	-.009	.005	-.207	1.000	
30-49	-.010	.006	.007	-.007	.003	-.303	-.432	1.000

Table 62: Correlation Matrix of the Variables Used in the Analysis of the Logit of the Suicide Rate for Females in 1981.

	LSui	Norelig	Divorce	Mflfp	Unemploy	Mobility
LSui	1.000					
Norelig	.135	1.000				
Divorce	.115	.435	1.000			
Mflfp	.016	.408	.489	1.000		
Unemploy	-.372	-.144	-.341	.208	1.000	
Mobility	.026	.627	.687	.605	-.046	1.000
Atlantic	-.448	-.338	-.154	-.182	.320	-.185
Quebec	.120	-.381	.059	-.079	.181	-.090
Ontario	.104	-.018	-.055	.163	-.126	-.086
ManSask	.077	-.073	-.114	-.010	-.172	-.067
Alberta	.093	.192	.179	.092	-.193	-.275
15-19	-.173	.041	-.447	.185	.787	-.097
20-29	-.061	.237	.351	.401	.030	.724
30-49	.071	.064	.482	.289	-.269	-.026

Table 62. Correlation Matrix Continued.

	Atlantic	Quebec	Ontario	ManSask	Alberta	15-19	20-29	30-49
Atlantic	1.000							
Quebec	-.234	1.000						
Ontario	-.256	-.265	1.000					
ManSask	-.208	-.214	-.234	1.000				
Alberta	-.168	-.173	-.189	-.154	1.000			
15-19	.011	-.002	-.001	-.008	.005	1.000		
20-29	.005	.002	-.007	-.018	.023	-.201	1.000	
30-49	.000	.012	.010	-.033	.001	-.286	-.432	1.000

Table 63: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Females in 1971.

Variable	b	SEb	Beta	t
Norelig	.082030	.006065	.119022	6.763***
Divorce	.001363	6.6851E-05	.219719	10.193***
Mflfp	.023178	.001580	.118297	7.336***
Unemploy	.003441	.001930	.013762	.082
Mobility	-.037874	.001261	-.230988	-15.018***
(Constant)	-10.090528	.055305		-91.226***

R^2=.10780 F=510.666***, df=5/21464

adjR^2=.10759

*** ≤ .001

Table 64: Regression Coefficients for the Effects of the Social Integration Variables on the Logit of the Suicide Rate for Females in 1981.

Variable	b	SEb	Beta	t
Norelig	.049162	.003561	.106398	6.904***
Divorce	-3.90845E-04	4.0753E-05	-.090129	-4.795***
Mflfp	.023778	.001186	.163228	10.025***
Unemploy	-.073543	.001244	-.426069	-29.565***
Mobility	-.021720	.002289	-.096632	-4.746***
(Constant)	-9.703283	.048205		-100.647***

R^2=.16266 F=940.913***, df=5/24219

adjR^2=.16248

*** ≤ .001

Table 65: Regression Coefficients for the Effects of the Social Integration and Age Dummy Variables on the Logit of the Suicide Rate for Females in 1971.

Variable	b	SEb	Beta	t
Norelig	.035058	.006095	.050867	2.876**
Divorce	.001772	7.5519E-05	.285773	11.735***
Mflfp	.050477	.001583	.257624	15.943***
Unemploy	.085517	.004070	.341995	10.506***
Mobility	.019781	.002138	.120641	4.626***
15-19	-3.436182	.116003	-.526813	-14.631***
20-29	-3.583669	.079318	-.692459	-22.591***
30-49	-1.853025	.045056	-.415923	-20.629***
(Constant)	-12.073240	.075562		-79.889***

R^2=.20571 F=694.752***, df=8/21461

adjR^2=.20541

*** ≤ .001

** ≤ .01

Table 66: Regression Coefficients for the Effects of the Social Integration and Age Dummy Variables on the Logit of the Suicide Rate for Females in 1981.

Variable	b	SEb	Beta	t
Norelig	2.81858E-04	.003994	6.100E-04	.036
Divorce	4.890933E-04	5.3806E-05	.110903	4.469***
Mflfp	.036753	.001628	.252293	11.285***
Unemploy	-.100237	.001937	-.580721	-25.868***
Mobility	-.014115	.003616	-.062798	-1.952*
15-19	1.258215	.119068	.162291	5.284***
20-29	-1.284545	.102906	-.217676	-6.242***
30-49	-1.338621	.070515	-.260490	-9.492***
(Constant)	-9.858032	.065151		-75.656***

R^2=.19794 F=747.023***, df=8/24216

adjR^2=.19768

*** ≤ .001

* ≤ .05

Table 67: Regression Coefficients for the Effects of the Social Integration, Age and Regional Variables on the Logit of the Suicide Rate for Females in 1971.

Variable	b	SEb	Beta	t
Norelig	.159988	.016214	.232135	4.934***
Divorce	.002316	8.1066E-05	.373489	14.288***
Mflfp	.037942	.002064	.193647	9.190***
Unemploy	.023174	.004728	.092677	2.451**
Mobility	-.055820	.002477	-.340439	-11.266***
15-19	-1.386902	.132249	-.212631	-5.244***
20-29	-1.337032	.094693	-.258350	-7.060***
30-49	-1.484644	.050585	-.333237	-14.675***
Atlantic	-.421161	.139101	-.076073	-1.514
Quebec	2.104026	.143040	.389168	7.355***
Ontario	1.079821	.118456	.208910	4.558***
ManSask	1.054360	.122822	.176875	4.292***
Alberta	-.039612	.104800	-.005518	-.189
(Constant)	-10.10815	.149894		-35.061***

R^2=.29695 F=697.107***, df=13/21456

adjR^2=.29652

*** ≤ .001

** ≤ .01

Table 68: Regression Coefficients for the Effects of the Social Integration, Age and Regional Variables on the Logit of the Suicide Rate for Females in 1981.

Variable	b	SEb	Beta	t
Norelig	-.010044	.003821	-.021735	-1.315
Divorce	2.96609E-04	5.1541E-05	.068416	2.878**
Mflfp	.015307	.001618	.105077	4.731***
Unemploy	-.059243	.002037	-.343221	-14.542***
Mobility	-.019839	.003456	-.088267	-2.871**
15-19	.458634	.114946	.059157	1.995*
20-29	-.459527	.099783	-.077870	-2.303**
30-49	-.523947	.069450	-.101958	-3.772***
Atlantic	-2.136041	.044327	-.332329	-24.094***
(Constant)	-9.005226	.064704		-69.589***

R^2=.26812 F=985.676***, df=9/24215

adjR^2=.26785

*** ≤ .001

** ≤ .01

* ≤ .05

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Appendix A: Relevant Tables Not Referred to in Text

Table A1. Suicide Rates, Three Year Averages, By Five Year Age Groups, Males, Provinces, 1970-1972.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
1970	3.3	0.0	19.2	30.8	40.7	8.2	16.9	43.9	6.1
1971	3.3	4.5	5.7	14.2	7.5	8.0	16.6	8.8	14.8
1972	0.0	4.2	0.0	6.9	0.0	24.0	25.0	0.0	7.8
Mean	**2.2**	**2.9**	**8.3**	**17.3**	**16.1**	**13.4**	**19.5**	**17.6**	**9.6**
N.S									
1970	14.9	34.5	16.9	10.0	30.6	30.6	10.1	15.3	32.9
1971	4.9	26.0	26.2	45.7	19.0	25.3	24.3	15.1	23.7
1972	16.7	27.8	21.4	22.4	33.2	35.5	29.5	50.5	17.4
Mean	**12.2**	**29.4**	**21.5**	**26.0**	**27.6**	**30.5**	**21.3**	**27.0**	**24.7**
N.B									
1970	0.0	6.7	5.4	27.0	13.7	13.1	44.3	6.8	14.5
1971	0.0	6.9	28.5	5.9	25.3	12.9	31.0	20.1	23.8
1972	11.0	26.3	4.4	17.2	37.7	25.8	12.4	26.7	11.7
Mean	**3.7**	**13.3**	**12.8**	**16.7**	**25.6**	**17.3**	**29.2**	**17.9**	**16.7**
Que.									
1970	8.0	17.0	18.8	17.2	26.1	17.6	29.6	23.3	22.0
1971	12.4	19.1	20.4	22.1	21.0	22.5	18.6	20.3	22.4
1972	13.4	30.1	22.3	23.9	17.2	18.6	19.0	29.1	19.5
Mean	**11.3**	**22.1**	**20.5**	**21.1**	**21.4**	**19.6**	**22.4**	**24.2**	**21.3**
Ont.									
1970	9.3	21.8	18.1	16.5	24.2	28.7	23.2	29.8	31.0
1971	14.6	24.2	22.7	19.0	25.1	37.6	35.3	41.8	46.1
1972	14.5	21.4	22.8	18.4	21.7	31.4	32.1	29.2	30.3
Mean	**12.8**	**22.5**	**21.2**	**18.0**	**23.7**	**32.6**	**30.2**	**33.6**	**35.8**
Man.									
1970	16.5	23.8	34.5	22.9	38.3	36.6	14.5	19.5	37.8
1971	14.3	34.9	20.5	14.3	44.7	29.9	29.2	27.9	30.6
1972	12.2	22.6	8.4	46.1	30.3	15.2	33.1	51.6	40.6
Mean	**14.3**	**27.1**	**21.1**	**27.8**	**37.8**	**27.2**	**25.6**	**33.0**	**36.3**
Sask.									
1970	8.1	20.3	26.4	21.6	25.0	50.4	31.1	27.9	30.0
1971	16.4	11.4	14.9	12.6	16.2	11.6	34.4	32.1	24.2
1972	16.1	59.9	26.1	21.7	46.8	39.8	46.5	44.4	29.4
Mean	**13.5**	**30.5**	**22.5**	**18.6**	**29.3**	**33.9**	**37.3**	**34.8**	**27.9**
Alta.									
1970	23.9	38.4	16.9	28.2	15.6	18.1	36.6	36.8	40.1
1971	24.4	28.3	30.1	19.7	17.5	36.3	29.4	32.0	21.0
1972	23.6	35.5	20.7	26.8	25.3	35.9	41.9	31.2	26.4
Mean	**24.0**	**34.1**	**22.6**	**24.9**	**19.5**	**30.1**	**36.0**	**33.3**	**29.2**
B.C									
1970	9.2	28.9	23.9	34.2	34.6	42.3	35.4	40.5	36.3
1971	4.9	35.4	20.8	23.5	35.8	37.3	37.5	52.4	40.0
1972	10.3	34.6	38.5	26.1	29.1	26.4	32.0	37.0	30.3
Mean	**8.1**	**33.0**	**27.7**	**27.9**	**33.2**	**35.3**	**35.0**	**43.3**	**35.5**

Source: National Task Force Report on Suicide in Canada. Cat. H39-107/1987E. Tables A1-A33.

Table A2. Suicide Rates, Three Year Averages, By Five Year Age Groups, Females, Provinces, 1970-1972.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
1970	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	8.3	8.7	0.0	0.0	6.0
1972	0.0	0.0	5.5	0.0	0.0	17.4	0.0	9.5	0.0
Mean	**2.2**	**0.0**	**1.8**	**0.0**	**2.8**	**8.7**	**0.0**	**3.2**	**2.0**
N.S.									
1970	5.2	0.0	0.0	0.0	10.3	9.9	0.0	5.0	4.3
1971	0.0	3.0	7.8	0.0	0.0	10.0	0.0	4.9	0.0
1972	0.0	8.5	7.4	9.2	14.7	10.1	4.8	4.9	8.0
Mean	**1.7**	**3.8**	**5.1**	**3.1**	**8.3**	**10.0**	**1.6**	**4.9**	**4.1**
N B.									
1970	0.0	0.0	0.0	13.2	6.5	6.3	0.0	20.0	7.6
1971	0.0	3.6	5.1	0.0	0.0	6.4	18.2	0.0	5.4
1972	2.8	0.0	9.5	0.0	6.3	0.0	12.2	6.5	5.3
Mean	**0.9**	**1.2**	**4.9**	**4.4**	**4.3**	**4.2**	**10.1**	**8.8**	**6.1**
Que.									
1970	2.7	7.9	8.2	7.5	7.6	7.5	8.8	5.6	5.8
1971	2.3	3.6	5.0	8.5	8.3	11.7	9.9	6.9	6.6
1972	3.9	4.9	11.3	6.2	9.5	7.8	8.6	7.4	6.0
Mean	**3.0**	**5.5**	**8.2**	**7.4**	**8.5**	**9.0**	**9.1**	**6.6**	**6.1**
Ont.									
1970	3.8	4.1	8.4	12.2	10.6	16.5	16.7	20.5	13.6
1971	2.8	6.8	6.1	12.7	10.5	13.8	18.5	22.4	12.5
1972	4.2	6.0	14.1	11.1	13.5	20.8	16.3	19.5	12.4
Mean	**3.6**	**5.6**	**9.5**	**12.0**	**11.5**	**17.0**	**17.2**	**20.8**	**12.8**
Man.									
1970	10.7	9.6	0.0	3.9	3.9	7.1	24.1	11.3	5.3
1971	4.2	14.1	6.1	7.4	15.5	18.7	10.3	19.3	10.4
1972	2.1	2.3	14.6	11.0	7.9	15.4	7.0	0.0	6.1
Mean	**5.7**	**8.7**	**6.9**	**7.4**	**9.1**	**13.7**	**13.8**	**10.2**	**7.3**
Sask.									
1970	4.2	5.2	3.9	8.7	12.9	12.0	7.7	7.9	5.7
1971	2.1	0.0	0.0	4.3	8.5	0.0	15.4	0.0	4.5
1972	2.1	2.9	7.6	13.2	13.2	8.4	7.9	16.2	11.0
Mean	**2.8**	**2.7**	**3.8**	**8.7**	**11.5**	**6.8**	**10.3**	**8.0**	**7.1**
Alta.									
1970	5.3	9.2	10.9	12.3	10.6	8.5	16.0	10.8	6.1
1971	3.8	4.2	1.7	6.1	8.5	22.0	6.9	5.4	5.1
1972	11.1	6.7	3.2	15.8	10.6	17.5	6.7	7.9	3.3
Mean	**6.7**	**6.7**	**5.3**	**11.4**	**9.9**	**16.0**	**9.9**	**8.0**	**4.8**
B.C.									
1970	3.2	6.9	14.6	6.2	14.6	14.0	34.5	22.8	12.5
1971	9.2	9.8	12.8	18.5	18.3	16.2	27.6	28.9	17.0
1972	6.9	11.3	9.5	10.2	17.8	19.8	19.9	23.4	16.9
Mean	**6.4**	**9.3**	**12.3**	**11.6**	**16.9**	**16.7**	**27.3**	**25.0**	**15.5**

Source: National Task Force Report on Suicide in Canada. Cat. H39-107/1987E. Tables A1-A33.

Table A3. Suicide Rates, Three Year Averages, By Five Year Age Groups, Males, Provinces, 1980-1982.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
1980	9.2	10.7	0.0	17.2	6.0	7.4	7.9	17.1	4.9
1981	9.4	24.0	8.2	8.7	0.0	7.3	8.1	34.5	2.5
1982	15.8	12.0	12.5	26.2	0.0	21.3	32.6	8.6	16.8
Mean	**11.5**	**15.6**	**6.9**	**17.4**	**2.0**	**12.0**	**16.2**	**20.1**	**8.1**
N.S.									
1980	15.6	32.9	30.4	17.5	22.8	23.3	40.0	21.1	34.3
1981	11.4	33.1	20.0	23.4	37.2	22.8	39.2	21.0	18.2
1982	16.5	25.1	42.0	23.6	24.3	13.2	34.2	30.9	23.3
Mean	**14.5**	**30.4**	**30.8**	**21.5**	**28.1**	**19.8**	**37.8**	**24.3**	**25.3**
N.B.									
1980	10.4	33.1	32.1	17.4	27.9	35.3	31.6	32.9	30.7
1981	5.4	40.2	20.3	24.6	27.6	28.4	25.5	33.0	31.9
1982	22.2	52.6	26.9	31.8	17.1	27.4	12.8	19.6	36.6
Mean	**12.7**	**42.0**	**26.4**	**24.6**	**24.2**	**30.4**	**23.3**	**28.5**	**33.1**
Que.									
1980	19.6	35.3	32.6	28.8	33.8	26.4	32.1	26.8	32.7
1981	19.9	38.8	36.1	33.6	28.1	37.3	29.4	35.0	33.0
1982	23.7	40.7	38.9	33.7	28.9	41.1	31.2	37.0	25.2
Mean	**21.1**	**38.3**	**35.9**	**32.0**	**30.3**	**34.9**	**30.9**	**32.9**	**30.3**
Ont.									
1980	15.2	22.2	30.9	20.4	18.1	24.1	31.2	30.0	28.5
1981	16.5	25.2	19.2	22.4	17.2	22.2	27.1	28.4	29.9
1982	15.7	23.8	26.3	20.4	22.4	21.3	28.5	31.3	30.0
Mean	**15.8**	**23.7**	**25.5**	**21.1**	**19.2**	**22.5**	**28.9**	**29.9**	**29.5**
Man.									
1980	19.8	30.7	30.1	20.6	13.1	11.9	24.1	8.1	20.4
1981	39.0	44.5	27.9	22.9	25.9	15.5	36.4	40.4	28.0
1982	19.0	37.7	31.9	17.7	39.2	7.6	45.0	20.2	29.7
Mean	**25.9**	**37.6**	**30.0**	**20.4**	**26.1**	**11.7**	**35.2**	**22.9**	**26.0**
Sask.									
1980	36.4	36.6	31.8	23.2	41.5	17.4	29.7	54.6	28.7
1981	41.4	42.3	31.3	29.1	38.2	29.3	26.2	25.2	32.3
1982	57.4	55.2	42.4	42.4	28.5	17.2	31.0	16.9	37.1
Mean	**45.1**	**44.7**	**35.2**	**31.6**	**36.1**	**21.3**	**29.0**	**32.2**	**32.7**
Alta.									
1980	31.8	42.4	47.1	42.1	24.9	18.2	43.4	39.2	34.0
1981	32.8	34.3	16.6	33.5	33.5	25.2	36.3	29.4	32.0
1982	25.8	32.9	28.7	31.8	23.1	36.6	43.1	40.0	33.6
Mean	**30.1**	**36.5**	**30.8**	**35.8**	**27.2**	**26.7**	**40.9**	**36.2**	**33.2**
B.C.									
1980	20.1	31.5	31.7	31.3	30.4	35.5	23.9	34.0	30.7
1981	22.9	33.6	31.5	29.6	25.1	31.8	13.7	21.7	28.1
1982	22.6	24.4	46.8	32.7	20.3	15.9	22.0	38.6	33.5
Mean	**21.9**	**29.8**	**36.7**	**31.2**	**25.3**	**27.7**	**19.9**	**31.4**	**30.8**

Source: National Task Force Report on Suicide in Canada. Cat. H39-107/1987E. Tables A1-A33.

Table A4. Suicide Rates, Three Year Averages, By Five Year Age Groups, Females, Provinces, 1980-1982.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
1980	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0
1981	0.0	0.0	4.0	4.4	0.0	7.7	0.0	0.0	2.3
1982	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	9.7
Mean	**0.0**	**1.3**	**1.3**	**1.5**	**0.0**	**2.6**	**2.8**	**0.0**	**4.0**
N.S.									
1980	0.0	0.0	2.8	6.1	4.0	4.8	0.0	5.0	4.4
1981	9.6	0.0	0.0	0.0	7.6	0.0	14.9	10.0	5.4
1982	5.0	5.1	5.4	2.9	3.5	0.0	19.8	0.0	9.6
Mean	**4.9**	**1.7**	**2.7**	**3.0**	**5.0**	**1.6**	**11.6**	**5.0**	**6.5**
N.B.									
1980	0.0	2.9	0.0	7.3	5.0	0.0	6.3	6.3	5.8
1981	5.7	0.0	0.0	7.1	0.0	5.9	0.0	6.4	5.7
1982	2.9	3.1	0.0	3.5	0.0	0.0	12.7	18.8	5.6
Mean	**2.9**	**2.0**	**0.0**	**6.0**	**1.7**	**2.0**	**6.3**	**10.5**	**5.7**
Que.									
1980	3.2	7.0	10.5	9.1	8.7	7.4	17.4	14.7	6.8
1981	2.6	7.2	9.8	9.8	9.5	13.6	12.1	15.6	12.0
1982	2.8	6.6	10.9	10.1	16.5	16.8	11.7	16.0	7.5
Mean	**2.9**	**6.9**	**10.4**	**9.7**	**11.6**	**12.6**	**13.7**	**15.4**	**8.8**
Ont.									
1980	4.4	7.0	6.7	6.3	11.1	13.1	12.5	14.2	11.3
1981	2.5	4.5	5.9	6.0	7.6	13.5	13.4	13.7	11.0
1982	2.6	6.0	6.8	7.2	9.3	10.7	10.4	9.4	9.5
Mean	**3.2**	**5.8**	**6.5**	**6.5**	**9.3**	**12.4**	**12.1**	**12.4**	**10.6**
Man.									
1980	4.1	8.4	13.8	5.2	10.0	4.0	16.1	15.6	11.9
1981	2.1	10.7	4.6	7.6	0.0	3.9	4.1	15.7	3.3
1982	2.2	4.2	13.5	5.0	6.1	3.8	8.3	3.9	9.8
Mean	**2.8**	**7.8**	**10.6**	**5.9**	**5.4**	**3.9**	**9.5**	**11.7**	**8.3**
Sask.									
1980	2.1	6.8	18.3	6.2	0.0	4.5	8.8	20.9	10.3
1981	17.1	15.9	7.5	18.2	7.9	8.8	9.0	4.3	10.1
1982	11.1	11.2	7.2	14.8	3.7	0.0	4.5	8.6	2.7
Mean	**10.1**	**11.3**	**11.0**	**13.1**	**3.9**	**4.4**	**7.4**	**11.3**	**7.7**
Alta.									
1980	9.7	9.3	8.9	15.1	15.4	7.6	14.3	13.1	15.8
1981	3.8	3.1	5.3	6.4	13.0	19.8	13.9	10.6	15.5
1982	3.9	6.1	7.4	8.2	10.4	8.6	11.7	16.5	4.3
Mean	**5.8**	**6.2**	**7.2**	**9.9**	**12.9**	**12.0**	**13.3**	**13.4**	**11.9**
B.C.									
1980	2.5	9.7	7.6	9.2	2.3	5.7	9.1	21.0	10.5
1981	4.3	7.9	9.6	12.6	13.0	8.0	13.4	10.2	9.3
1982	2.6	5.5	8.6	8.3	6.0	3.8	8.8	13.2	12.3
Mean	**3.1**	**7.7**	**8.6**	**10.0**	**7.1**	**5.8**	**10.4**	**14.8**	**10.7**

Source: National Task Force Report on Suicide in Canada. Cat. H39-107/1987E. Tables A1-A33.

Table A5. Percent No religion, By Five Year Age Groups and Sex, Provinces, 1971.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	0.4	0.9	1.0	1.0	0.8	0.7	0.7	0.6	0.3
Female	0.3	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.2
N.S.									
Male	2.4	4.6	4.7	4.4	3.6	3.2	3.0	2.7	2.4
Female	1.7	2.8	2.6	2.2	1.8	1.5	1.4	1.2	0.8
N.B.									
Male	1.9	3.7	3.6	3.5	3.2	2.9	2.7	2.5	2.2
Female	1.4	2.1	1.8	1.5	1.3	1.2	1.1	0.9	0.7
Que.									
Male	1.1	2.7	2.7	2.5	2.0	1.7	1.5	1.2	1.0
Female	0.8	1.8	1.7	1.5	1.2	1.0	0.8	0.7	0.4
Ont.									
Male	4.6	8.6	8.4	7.8	6.7	5.9	5.3	4.5	3.6
Female	3.7	5.0	4.8	4.4	3.8	3.2	2.8	2.3	1.5
Man.									
Male	5.0	8.2	7.8	7.2	6.4	5.6	5.0	4.5	4.0
Female	3.6	4.8	4.3	3.8	3.3	3.0	2.7	2.3	1.8
Sask.									
Male	4.0	7.3	7.0	6.5	5.7	5.2	4.7	4.1	4.0
Female	2.7	4.1	3.8	3.4	2.9	2.5	2.4	2.2	1.8
Alta.									
Male	7.5	11.8	11.3	10.5	9.1	8.1	7.4	6.8	6.4
Female	5.6	7.0	6.6	6.0	5.1	4.6	4.5	3.9	2.8
B.C.									
Male	14.5	21.1	20.4	19.2	17.7	16.0	14.3	12.9	11.7
Female	11.8	14.6	13.5	12.3	11.0	9.8	8.7	7.3	5.8

Source: Statistics Canada. 1971 Census of Canada, Vol. 1 Part 4. Cat. 92-732. Table 8.

Table A6. Percent No religion, By Five Year Age Groups and Sex, Provinces, 1981.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	1.0	1.3	1.8	2.3	1.9	1.8	2.1	1.7	0.8
Female	0.5	0.7	1.4	1.3	1.1	1.1	1.3	1.0	0.3
N.S.									
Male	4.1	5.9	7.4	7.6	6.2	5.2	4.6	3.8	2.6
Female	3.4	3.7	4.5	4.3	3.5	2.8	2.2	1.6	0.9
N.B.									
Male	2.8	4.3	5.3	5.2	4.5	4.0	3.5	3.0	2.4
Female	2.0	2.7	3.3	2.5	2.0	1.7	1.4	1.3	0.8
Que.									
Male	1.5	2.3	3.5	3.8	3.2	2.6	2.0	1.5	1.1
Female	1.3	1.7	2.6	2.8	2.2	1.7	1.3	1.0	0.6
Ont.									
Male	7.4	10.3	12.1	12.3	10.3	8.8	7.6	6.3	4.7
Female	6.0	7.5	8.3	7.5	6.5	5.5	4.7	3.7	2.4
Man.									
Male	8.7	11.3	13.1	12.8	10.9	9.0	7.5	6.0	4.6
Female	6.9	7.8	8.2	7.5	6.2	5.1	4.3	3.3	2.2
Sask.									
Male	6.5	9.3	11.2	11.1	9.0	7.6	6.7	5.6	4.5
Female	5.0	6.3	7.0	6.4	5.5	4.6	3.7	2.9	2.1
Alta.									
Male	12.1	16.7	18.2	17.2	14.6	12.5	10.9	9.1	7.2
Female	9.8	12.0	12.3	10.8	9.0	7.7	6.8	5.5	4.0
B.C.									
Male	22.0	28.7	31.1	30.3	26.9	23.5	20.5	17.5	14.0
Female	20.0	22.8	23.4	21.4	18.1	15.6	13.6	11.0	7.9

Source: Statistics Canada. 1981 Census of Canada, Vol. 2 Provincial Series. Cats. 93-929 to 93-934. Table 6-1.

Table A7. Divorce Rates, By Five Year Age Groups and Sex, Provinces 1971.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	0.0	45.3	203.5	228.0	97.7	152.9	133.2	78.8	44.5
Female	3.4	106.5	243.5	186.2	124.7	165.8	73.2	47.9	33.2
N.S.									
Male	0.0	112.6	519.8	613.0	489.4	485.1	359.6	312.4	109.7
Female	12.8	266.4	646.5	640.6	444.6	348.8	343.3	264.4	49.0
N.B.									
Male	0.0	103.9	513.6	499.0	537.0	360.1	272.4	227.8	83.2
Female	11.6	267.3	528.5	537.4	479.8	285.9	309.0	132.8	38.1
Que.									
Male	0.0	55.9	358.6	503.8	495.2	453.3	393.0	278.3	122.6
Female	2.3	156.1	461.0	498.1	461.7	403.4	320.1	212.7	64.1
Ont.									
Male	1.1	208.4	785.2	920.5	761.5	705.4	578.8	484.2	213.4
Female	17.1	481.5	942.0	886.0	746.7	647.0	494.0	361.8	102.1
Man.									
Male	0.0	204.5	754.1	850.2	771.2	643.1	503.0	434.9	198.2
Female	12.6	452.4	898.4	827.6	694.0	599.0	434.0	377.4	110.5
Sask.									
Male	0.0	142.0	554.7	595.8	489.9	311.9	286.4	300.6	140.7
Female	15.0	386.4	627.0	566.6	393.6	339.7	262.2	222.0	92.1
Alta.									
Male	6.1	520.0	1271.6	1248.4	1032.7	880.3	727.5	682.8	290.1
Female	74.8	1011.4	1426.5	1092.6	910.4	909.8	632.6	534.7	154.0
B.C.									
Male	0.9	326.3	1146.6	1224.0	1069.2	969.2	858.8	712.5	285.3
Female	28.5	828.3	1335.5	1211.3	1038.2	949.0	710.4	541.6	153.2

Source: Statistics Canada. Unpublished Data.

Table A8. Divorce Rates, By Five Year Age Groups and Sex, Provinces, 1981.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	0.0	115.8	526.7	677.7	504.6	460.4	277.1	250.0	63.8
Female	0.0	318.7	633.7	604.8	432.6	332.0	261.9	117.6	41.4
N.S.									
Male	6.8	364.1	1371.0	1599.9	1343.3	1202.5	907.1	696.9	171.4
Female	50.3	728.1	1665.5	1367.6	1268.5	1066.0	565.2	400.8	83.7
N.B.									
Male	8.1	228.8	942.2	1218.8	920.6	823.9	726.8	535.2	119.1
Female	14.2	583.9	1123.5	935.9	986.2	656.3	482.0	382.3	51.2
Que.									
Male	0.6	199.2	1142.7	1594.6	1555.3	1323.8	1041.3	800.1	317.7
Female	15.8	525.8	1459.9	1545.1	1389.6	1129.4	851.6	543.7	172.6
Ont.									
Male	2.2	235.3	1202.0	1491.5	1250.5	981.3	756.0	589.3	203.1
Female	19.0	590.6	1467.3	1307.7	1063.0	819.3	640.2	418.2	103.8
Man.									
Male	2.1	222.7	1239.8	1534.7	1148.9	979.2	755.9	493.3	173.8
Female	23.2	546.3	1578.2	1346.3	1008.5	709.2	634.1	325.3	100.9
Sask.									
Male	4.1	360.6	1063.2	1191.7	1034.2	790.2	667.7	403.2	170.7
Female	19.3	738.7	1254.6	1110.8	982.8	698.5	542.2	259.8	91.1
Alta.									
Male	8.2	473.6	1641.8	1933.1	1752.0	1324.2	1126.3	832.2	294.5
Female	64.9	1117.0	2042.1	1832.1	1485.0	1200.7	909.8	565.7	170.6
B.C.									
Male	0.8	343.6	1472.8	1941.6	1757.8	1407.1	1006.0	767.3	286.6
Female	27.3	837.3	1956.4	1831.1	1463.8	1130.3	867.9	541.2	164.9

Source: Statistics Canada. 1981 Vital Statistics, Vol. II Marriages and Divorces. Cat. 84-205. Table 12.

Table A9. Married Labor Force Participation, By Five Year Age Groups and Sex, Provinces, 1971.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	66.7	87.8	91.7	95.1	92.7	92.2	88.3	77.4	45.8
Female	20.8	29.1	23.6	25.8	24.3	20.4	21.2	16.7	10.9
N.S.									
Male	100.0	93.9	96.2	98.3	97.5	93.5	94.4	89.2	51.9
Female	41.7	45.7	33.6	29.1	30.4	29.1	31.3	32.8	13.6
N.B.									
Male	75.0	91.0	94.7	96.8	87.7	95.4	92.1	88.1	56.9
Female	34.5	40.4	35.7	35.7	27.6	37.1	34.7	38.7	21.0
Que.									
Male	60.9	86.6	91.2	90.1	90.0	87.7	88.7	85.1	54.3
Female	30.5	42.3	32.4	27.1	26.7	30.2	28.2	25.4	12.9
Ont.									
Male	96.7	96.2	96.9	98.0	97.4	97.2	96.5	95.3	63.2
Female	43.8	56.6	45.1	43.0	48.0	47.9	47.2	45.2	22.8
Man.									
Male	100.0	94.4	97.7	97.4	95.9	95.7	97.6	91.4	61.8
Female	42.4	55.1	40.7	35.4	42.7	48.6	47.7	50.2	24.5
Sask.									
Male	85.7	98.3	98.3	97.7	97.2	98.1	95.3	95.4	59.5
Female	38.5	48.3	39.2	38.8	40.2	47.3	44.0	44.5	24.5
Alta.									
Male	87.0	95.5	96.5	97.5	95.7	95.5	96.3	96.1	60.2
Female	34.7	52.5	42.1	40.0	42.1	55.1	48.7	43.5	26.8
B.C.									
Male	100.0	93.6	96.0	97.5	98.2	97.2	95.1	93.9	54.6
Female	29.9	49.5	40.5	37.1	41.7	40.3	40.0	39.3	18.9

Source: Statistics Canada. 1971 Public Use Sample Tape.

Table A10. Married Labor Force Participation, By Five Year Age Groups and Sex, Provinces 1981.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	87.5	93.6	97.5	96.6	95.2	91.1	92.5	88.2	40.8
Female	38.1	55.0	56.0	54.8	48.3	51.8	38.9	35.0	12.2
N.S.									
Male	77.0	99.0	96.7	97.0	97.5	96.8	94.2	88.6	41.9
Female	55.3	65.2	59.5	56.6	52.6	57.0	51.9	43.8	16.4
N.B.									
Male	28.6	93.3	96.0	97.0	94.7	94.3	88.3	89.6	43.5
Female	62.1	59.5	59.2	53.5	55.4	53.3	46.3	46.8	16.0
Que.									
Male	76.4	95.2	96.0	95.4	95.2	93.6	92.6	90.4	49.0
Female	68.8	71.6	60.3	53.7	54.9	53.0	49.1	39.8	15.7
Ont.									
Male	90.0	97.2	97.4	98.0	98.0	97.8	97.0	94.6	54.6
Female	64.5	74.0	68.4	64.7	66.2	68.4	62.2	54.2	24.1
Man.									
Male	81.3	95.1	98.4	98.4	97.7	97.8	96.0	96.1	51.0
Female	47.2	67.0	62.8	61.5	63.8	64.9	61.9	54.0	22.9
Sask.									
Male	77.8	96.3	98.5	97.6	97.4	97.1	96.8	97.0	52.5
Female	55.0	62.4	57.2	55.8	59.4	66.8	62.4	53.6	22.9
Alta.									
Male	92.1	96.4	97.8	97.9	98.3	97.3	96.7	95.9	57.8
Female	64.2	69.9	60.5	62.1	64.1	64.1	62.6	56.2	25.9
B.C.									
Male	88.2	97.8	97.5	97.5	98.0	97.2	95.4	94.0	45.1
Female	61.5	68.7	60.5	60.9	61.5	67.2	59.5	52.6	20.1

Source: Statistics Canada. 1981 Public Use Sample Tape.

Table A11. Unemployment Rates, By Five Year Age Groups and Sex, Provinces, 1971.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	36.9	23.8	9.0	8.8	8.7	13.3	7.7	5.6	6.5
Female	28.2	4.9	8.3	5.9	3.3	0.0	0.0	0.0	2.5
N.S.									
Male	38.9	17.3	4.8	3.0	7.8	3.6	6.4	4.1	5.8
Female	33.0	8.6	9.8	4.7	4.5	3.7	4.8	2.5	3.1
N.B.									
Male	25.9	8.8	7.7	5.8	5.1	4.4	10.1	2.9	5.0
Female	34.7	11.4	9.1	14.3	0.0	6.1	6.8	10.4	5.3
Que.									
Male	46.1	19.1	8.8	5.5	7.4	6.6	6.3	6.3	8.2
Female	41.7	12.2	8.1	6.0	8.0	6.7	7.3	5.6	8.4
Ont.									
Male	25.0	10.5	4.3	3.7	3.6	3.1	3.9	3.2	5.4
Female	27.8	9.7	8.9	6.4	6.1	4.9	6.7	6.8	4.6
Man.									
Male	16.9	8.9	3.4	3.1	3.8	2.4	3.0	5.7	5.0
Female	29.7	7.2	8.0	5.0	4.2	4.5	5.2	2.9	5.2
Sask.									
Male	15.8	8.9	3.8	3.4	2.5	2.1	3.3	3.6	3.1
Female	15.6	7.6	9.8	3.4	1.1	2.6	1.7	4.3	3.7
Alta.									
Male	20.0	7.3	5.1	3.8	4.1	2.1	3.1	2.8	6.1
Female	24.9	11.5	6.3	5.5	6.6	3.4	4.9	3.4	6.4
B.C.									
Male	32.3	12.4	7.1	5.7	5.6	6.4	5.0	5.0	8.9
Female	27.4	13.0	9.7	11.0	7.4	6.9	9.5	6.9	6.9

Source: Statistics Canada. 1971 Public Use Sample Tape.

Table A12. Unemployment Rates, By Five Year Age Groups and Sex, Provinces, 1981.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	86.7	39.3	23.4	15.1	19.2	15.0	15.7	11.4	13.5
Female	85.8	39.4	20.0	24.1	18.4	19.1	24.7	16.4	11.3
N.S.									
Male	59.7	21.5	14.9	9.1	7.7	5.9	7.8	4.6	7.0
Female	62.4	23.8	17.6	11.4	8.8	17.5	13.1	10.6	8.9
N.B.									
Male	68.4	29.4	15.4	13.3	10.1	8.5	11.3	9.1	10.2
Female	70.6	29.3	18.8	13.2	17.7	25.0	14.4	12.2	9.1
Que.									
Male	55.3	24.9	12.7	9.3	7.0	7.7	6.9	7.2	8.6
Female	65.8	23.4	16.2	13.5	10.9	12.4	10.1	12.7	8.8
Ont.									
Male	34.0	13.0	6.2	4.7	3.7	3.2	3.6	4.0	4.6
Female	35.7	13.7	9.3	8.1	6.4	6.1	6.3	6.0	5.0
Man.									
Male	27.3	11.3	6.1	5.0	5.3	4.2	4.2	5.6	4.3
Female	28.4	12.0	11.7	7.1	5.5	6.2	5.8	5.6	4.7
Sask.									
Male	22.1	11.0	4.1	2.8	2.0	3.4	2.1	4.7	2.8
Female	31.4	8.4	6.8	5.1	3.6	3.9	4.2	3.7	2.7
Alta.									
Male	17.8	7.3	5.3	3.3	2.7	2.8	2.5	2.6	2.1
Female	19.5	7.4	6.2	3.3	3.6	4.9	2.4	4.0	3.2
B.C.									
Male	26.5	13.5	8.8	5.4	4.9	4.1	5.6	5.8	6.3
Female	31.4	14.9	12.2	9.2	9.3	8.3	7.3	5.7	8.1

Source: Statistics Canada. 1981 Public Use Sample Tape.

Table A13. Percent Intra-Provincial Mobility, By Five Year Age Groups and Sex, Provinces, 1971.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	21.8	39.0	51.7	42.8	36.8	25.0	20.6	16.0	15.8
Female	23.8	61.1	43.5	31.6	24.1	25.0	19.1	9.3	19.2
N.S.									
Male	23.4	37.2	55.3	47.4	37.2	24.9	20.1	22.1	16.2
Female	25.8	55.6	53.5	41.4	31.0	23.5	20.2	20.7	19.2
N.B.									
Male	23.5	34.5	48.5	47.0	31.7	22.4	17.7	16.9	19.0
Female	27.4	52.4	47.8	33.7	23.6	17.5	20.9	24.4	17.3
Que.									
Male	28.6	45.7	66.4	58.6	45.7	36.3	32.5	29.6	27.8
Female	31.1	58.2	66.7	51.8	39.6	32.7	30.0	28.8	31.0
Ont.									
Male	30.1	46.0	59.5	52.5	43.6	34.8	32.0	27.4	26.1
Female	34.7	58.6	59.4	48.3	38.6	31.3	29.4	27.2	28.1
Man.									
Male	29.3	47.7	55.2	46.4	42.4	32.1	29.3	17.9	22.8
Female	36.1	58.2	57.0	44.4	39.5	31.9	24.6	26.6	24.3
Sask.									
Male	21.2	49.6	63.3	51.8	37.4	33.0	25.4	21.1	24.2
Female	38.8	71.1	54.5	44.3	32.3	27.0	25.6	27.9	24.7
Alta.									
Male	30.8	46.9	53.6	43.1	38.2	32.0	30.9	30.1	25.1
Female	35.4	57.7	54.4	42.4	32.7	31.8	26.9	25.3	27.0
B.C.									
Male	30.9	43.5	52.6	50.0	43.5	39.2	32.3	31.4	29.4
Female	35.6	57.4	53.4	46.2	41.9	34.5	30.8	30.6	30.4

Source: Statistics Canada. 1971 Public Use Sample Tapes.

Table A14. Percent Intra-Provincial Mobility, By Five Year Age Groups and Sex, Provinces, 1981.

	Age Groups								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55+
NFLD									
Male	9.0	17.5	27.1	24.3	14.4	10.4	9.9	8.3	4.9
Female	11.8	24.5	25.7	18.1	11.4	11.2	6.2	5.4	5.2
N.S.									
Male	13.1	24.5	29.5	24.0	19.9	15.2	12.9	7.8	7.1
Female	13.0	28.7	32.4	24.9	16.8	14.0	10.8	8.5	7.0
N.B.									
Male	11.3	20.8	30.7	20.9	16.7	15.7	14.1	7.8	7.1
Female	15.3	27.8	33.9	21.0	15.9	12.9	14.0	7.1	4.6
Que.									
Male	12.7	22.0	33.9	29.2	21.2	16.3	11.2	9.2	8.7
Female	13.9	28.6	34.0	26.5	19.1	12.8	10.6	9.4	9.0
Ont.									
Male	14.3	23.7	32.8	28.7	21.9	16.9	13.1	10.8	9.2
Female	14.7	30.3	33.8	25.7	18.9	14.0	11.1	9.6	9.5
Man.									
Male	11.7	25.3	24.2	21.1	17.4	12.9	10.8	6.8	7.1
Female	16.0	28.5	27.0	20.7	13.7	29.8	9.7	7.2	6.0
Sask.									
Male	16.4	34.3	38.5	31.0	19.8	17.3	11.5	9.6	8.6
Female	21.0	44.4	40.6	26.9	19.9	16.2	11.7	9.6	9.0
Alta.									
Male	27.1	46.8	47.3	40.7	34.1	26.4	20.4	16.1	9.9
Female	28.7	50.0	43.2	38.7	28.8	22.9	15.7	12.3	11.4
B.C.									
Male	21.2	34.5	44.9	38.1	30.6	26.7	22.1	18.5	17.2
Female	22.0	39.9	45.5	38.7	28.8	22.7	18.1	18.7	14.6

Source: Statistics Canada. 1981 Public Use Sample Tape.

Table A15. Suicide Rates (Three Year Average), For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	6.1	8.1	1.3	0.8	3.7	4.5
N.S.	16.8	19.4	3.2	3.7	10.0	11.5
N.B.	10.5	20.7	3.2	3.0	6.8	11.3
Quc.	14.0	24.6	4.7	7.5	9.4	15.9
Ont.	17.8	18.9	8.4	6.8	13.1	12.8
Man.	19.7	20.5	6.2	5.9	13.0	13.1
Sask.	18.8	26.8	4.8	7.0	11.9	17.0
Alta.	19.2	25.2	5.5	7.5	12.5	16.5
B.C.	22.0	22.7	10.7	7.0	16.4	14.8

Source: National Task Force Report on Suicide In Canada. Cat. H39-107/1987E. Tables A1-A33

Table A16. Percent No Religion, For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	1.0	1.0	0.4	1.0	1.0	1.0
N.S.	3.0	5.0	2.0	3.0	2.0	4.0
N.B.	3.0	4.0	1.0	2.0	2.0	3.0
Que.	2.0	2.0	1.0	2.0	1.0	2.0
Ont.	6.0	8.0	3.0	5.0	5.0	7.0
Man.	6.0	9.0	3.0	5.0	4.0	7.0
Sask.	5.0	7.0	3.0	4.0	4.0	6.0
Alta.	9.0	13.0	5.0	9.0	7.0	11.0
B.C.	16.0	23.0	10.0	16.0	13.0	19.0

Source: Statistics Canada. 1971 Census of Canada, Vol. 1 Part 4. Cat. 92-732. Table 8.
Statistics Canada. 1981 Census of Canada,Vol. 2 Provincial Series. Cat. 93-929 to 93-934. Table 6-1.

Table A17. Divorce Rates (per 100,000), For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	90.0	284.5	93.4	284.0	91.6	284.3
N.S.	264.0	718.9	261.7	690.1	262.9	704.2
N.B.	224.5	519.1	223.3	501.8	223.9	510.3
Que.	250.0	781.5	240.9	742.0	245.3	761.2
Ont.	450.6	661.2	438.5	626.7	444.5	643.5
Man.	397.2	624.0	392.1	594.5	394.6	608.9
Sask.	250.6	531.1	256.4	528.0	253.5	529.5
Alta.	647.5	973.0	666.3	1013.1	656.8	992.7
B.C.	624.5	896.1	627.3	872.7	625.9	884.3

Source: Unpublished Data, 1971.
Statistics Canada. 1981 Vital Statistics Volume Two Marriages and Divorces, Cat. 84-205, Table 10.

Table A18. Married Labor Force Participation Rates, For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	77.0	81.0	21.0	42.0	49.0	62.0
N.S.	82.0	80.0	29.0	46.0	56.0	63.0
N.B.	82.0	79.0	33.0	45.0	57.0	62.0
Que.	80.0	83.0	27.0	47.0	54.0	65.0
Ont.	88.0	85.0	43.0	56.0	65.0	70.0
Man.	85.0	82.0	41.0	51.0	63.0	67.0
Sask.	85.0	83.0	39.0	50.0	62.0	66.0
Alta.	87.0	89.0	42.0	56.0	65.0	72.0
B.C.	84.0	81.0	36.0	51.0	60.0	66.0

Source: 1971 and 1981 Public Use Sample Tapes.

Table A19. Unemployment Rates, For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	12.0	24.0	8.0	29.0	11.0	26.0
N.S.	9.0	14.0	9.0	19.0	9.0	16.0
N.B.	8.0	18.0	11.0	24.0	9.0	20.0
Que.	11.0	14.0	12.0	19.0	11.0	16.0
Ont.	6.0	8.0	9.0	11.0	7.0	9.0
Man.	6.0	8.0	8.0	10.0	7.0	9.0
Sask.	5.0	6.0	6.0	8.0	5.0	7.0
Alta.	6.0	5.0	9.0	7.0	7.0	6.0
B.C.	9.0	9.0	11.0	12.0	10.0	10.0

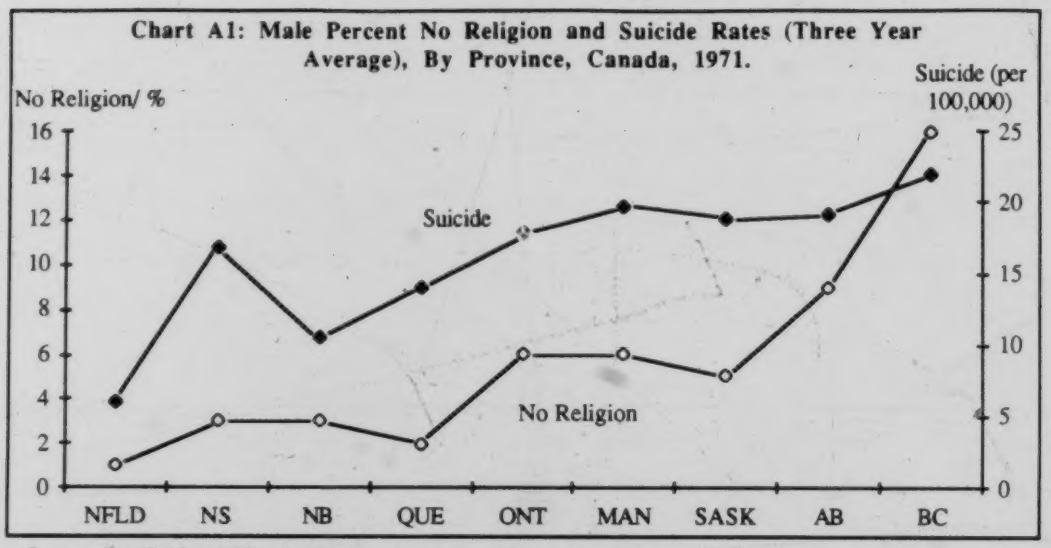
Source: 1971 and 1981 Public Use Sample Tapes.

Table A20. Percent Intra-Provincial Mobility, For Males, Females and Total, By Province, 1971 and 1981.

	Male		Female		Total	
	1971	1981	1971	1981	1971	1981
NFLD	28.0	14.0	30.0	14.0	29.0	14.0
N.S.	29.0	16.0	31.0	17.0	30.0	16.0
N.B.	27.0	16.0	29.0	17.0	28.0	16.0
Que.	40.0	18.0	41.0	18.0	41.0	18.0
Ont.	38.0	18.0	39.0	18.0	38.0	18.0
Man.	34.0	15.0	37.0	18.0	35.0	15.0
Sask.	34.0	20.0	37.0	21.0	35.0	20.0
Alta.	36.0	31.0	37.0	30.0	37.0	30.0
B.C.	38.0	28.0	39.0	27.0	38.0	27.0

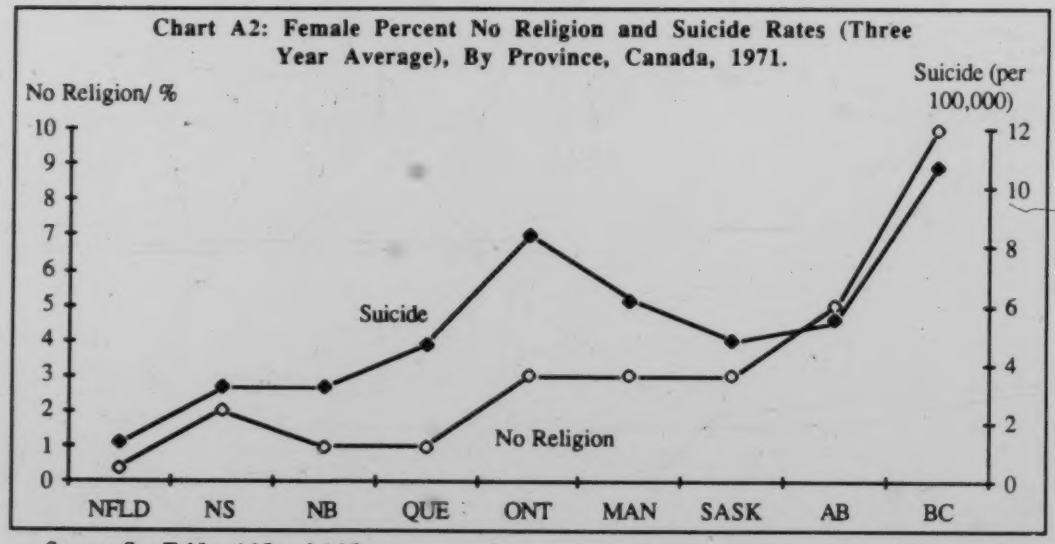
Source: 1971 and 1981 Public Use Sample Tapes.

Chart A1: Male Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1971.



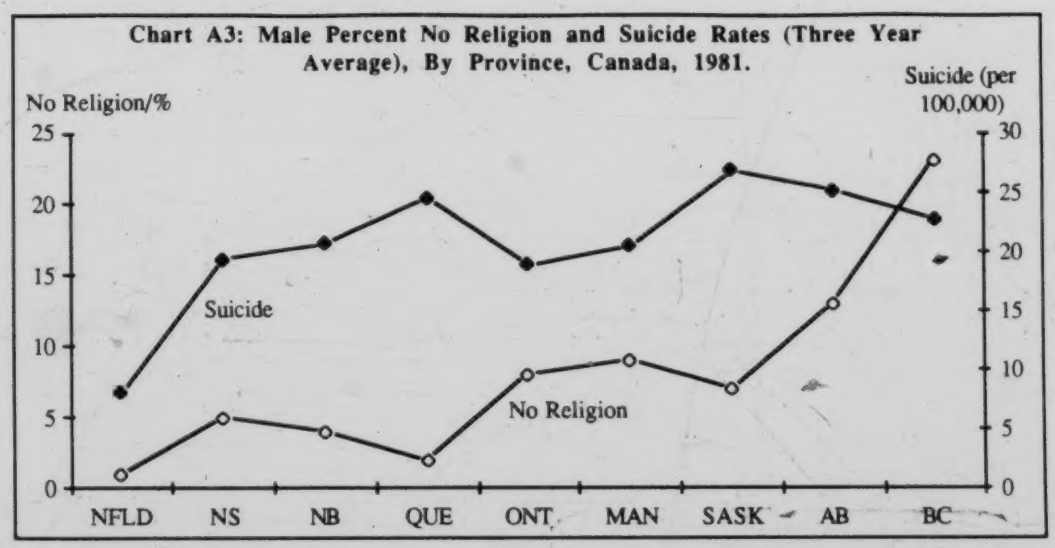
Source: See Tables A15 and A16

Chart A2: Female Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1971.



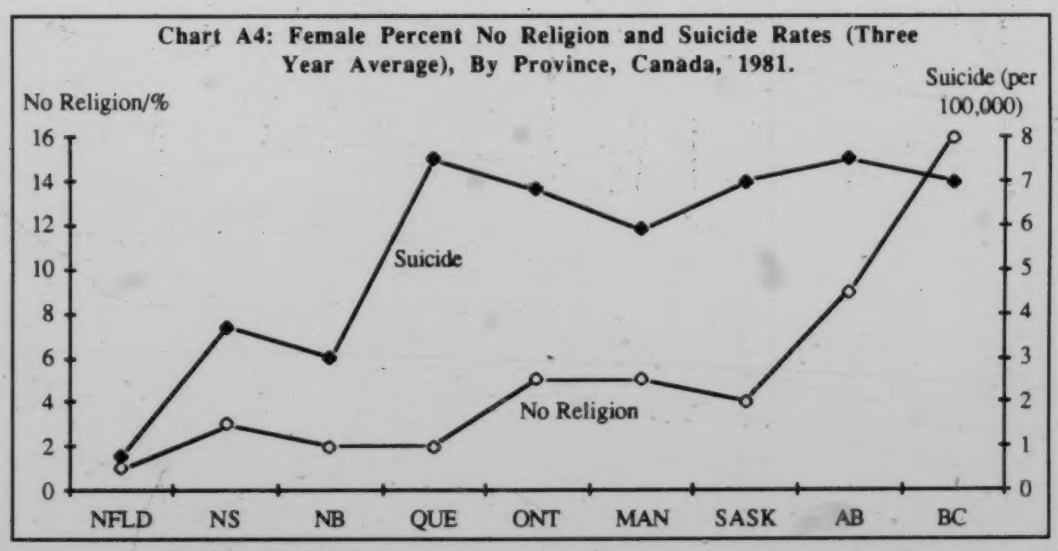
Source: See Tables A15 and A16

Chart A3: Male Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A16

Chart A4: Female Percent No Religion and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A16

Table A21. Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on Percent No Religion.

Variable	b	SEb	Beta	t
Time	2.472222	.309703	.224330	7.983***
P8	-8.041667	.656980	-.458646	-12.240***
P7	-11.711111	.656980	-.667928	-17.826***
P6	-10.894444	.656980	-.621351	-16.583***
P5	-10.891667	.656980	-.621192	-16.578***
P4	-15.219444	.656980	-.868022	-23.166***
P3	-14.444444	.656980	-.823820	-21.986***
P2	-13.600000	.656980	-.775659	-20.701***
P1	-16.041667	.656980	-.914916	-24.417***
(Constant)	15.733333	.489684		32.130***

R^2=.75202 F=105.802355***, df=9/314

adjR^2=.74491

*** ≤ .001

Table A22. Regression Coefficients for the Effects of the Provincial Dummy Variables on 1971 Percent No Religion.

Variable	b	SEb	Beta	t
P8	-6.533333	.682183	-.492464	-9.577***
P7	-9.350000	.682183	-.70477	-13.706***
P6	-8.850000	.682183	-.667088	-12.973***
P5	-8.650000	.682183	-.652013	-12.680***
P4	-12.016667	.682183	-.905782	-17.615***
P3	-11.355556	.682183	-.855950	-16.646***
P2	-10.866667	.682183	-.819099	-15.929***
P1	-12.922222	.682183	-.974041	-18.942***
(Constant)	13.477778	.482376		27.940***

R^2=.77244 F=64.91879***, df=8/153

adjR^2=.76054

*** ≤ .001

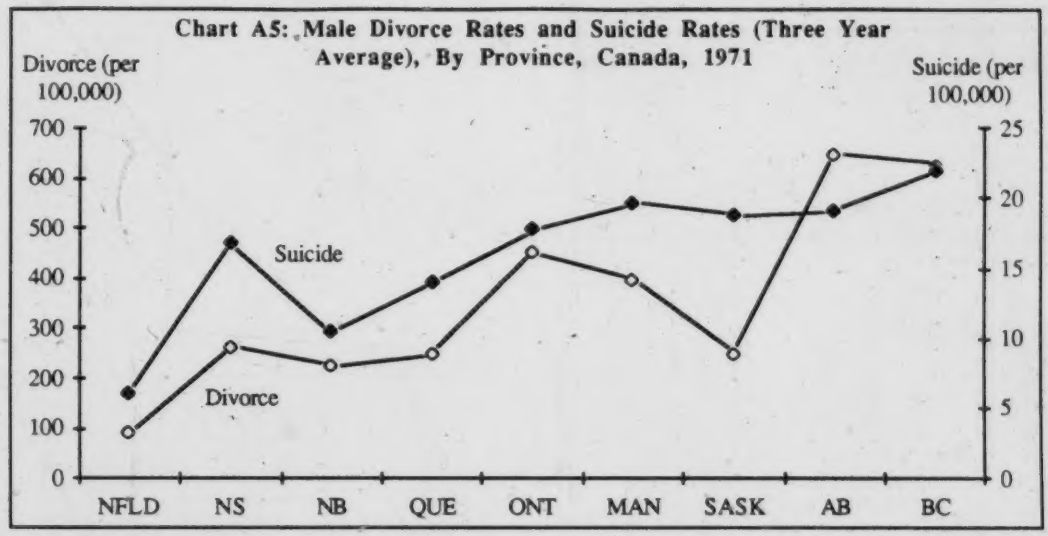
Table A23. Regression Coefficients for the Effects of the Provincial Dummy Variables on 1981 Percent No Religion.

Variable	b	SEb	Beta	t
P8	-9.550000	1.044076	-.472852	-9.147***
P7	-14.072222	1.044076	-.696763	-13.478***
P6	-12.938889	1.044076	-.640647	-12.393***
P5	-13.133333	1.044076	-.650275	-12.579***
P4	-18.422222	1.044076	-.912146	-17.645***
P3	-17.533333	1.044076	-.868134	-16.793***
P2	-16.333333	1.044076	-.808718	-15.644***
P1	-19.161111	1.044076	-.948730	-18.352***
(Constant)	20.461111	.738273		27.715***

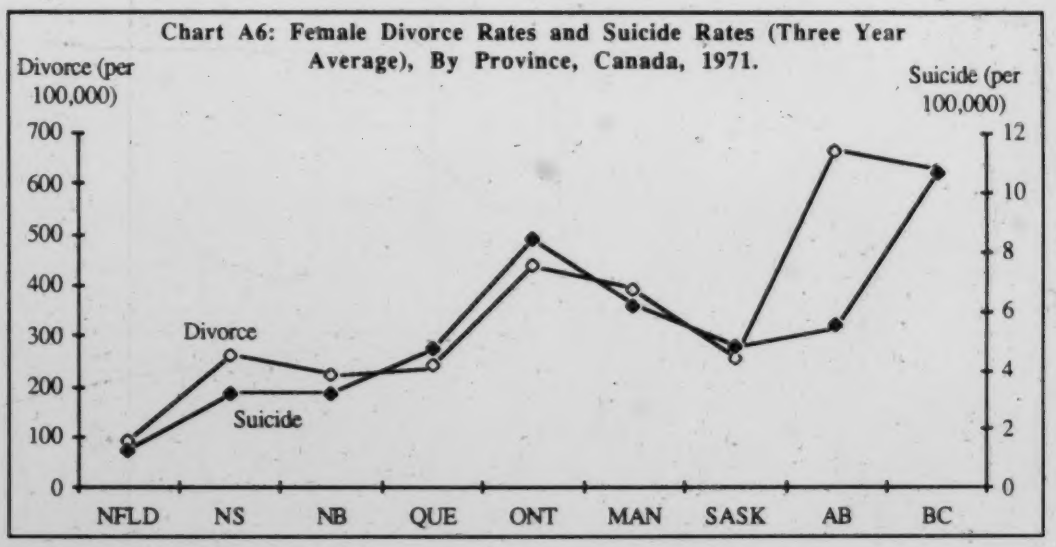
R^2=.77000 F=64.02819***, df=8/153

adjR^2=.75798

*** ≤ .001

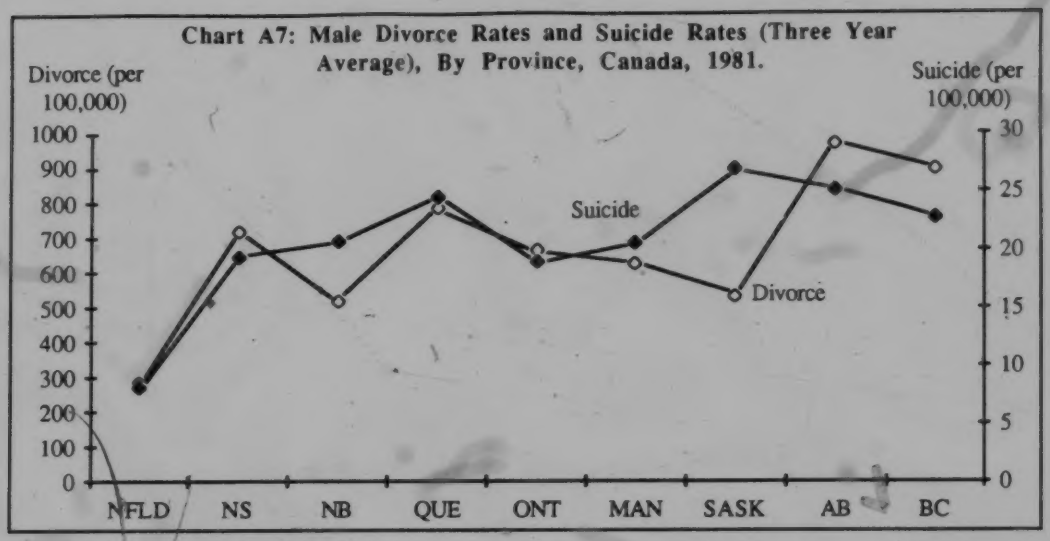


Source: See Tables A15 and A17



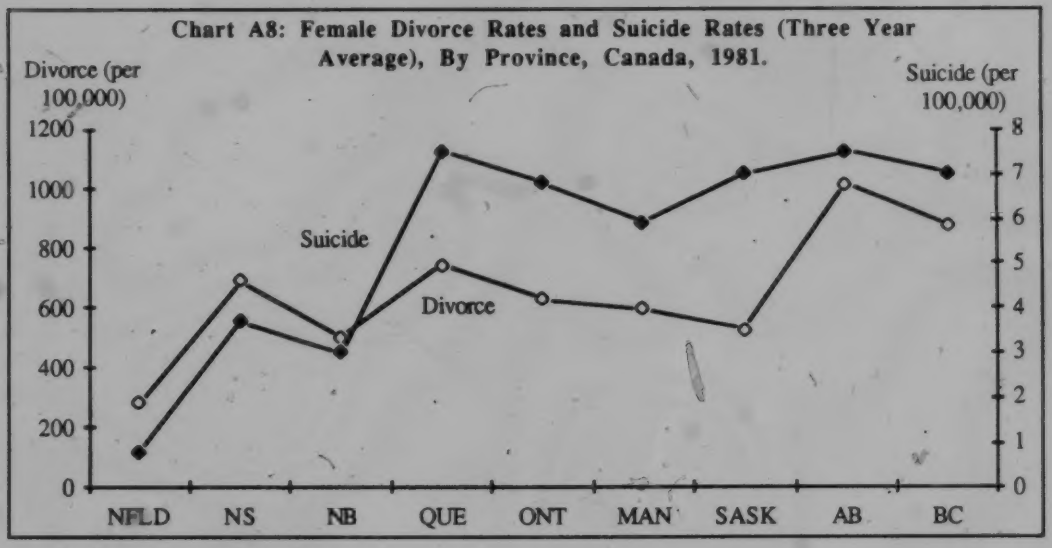
Source: See Tables A15 and A17

Chart A7: Male Divorce Rates and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A17

Chart A8: Female Divorce Rates and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A17

Table A24. Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on Divorce.

Variable	b	SEb	Beta	t
Time	319.208025	46.179589	.331614	6.912***
P8	27.430556	97.961701	.017911	.280
P7	-391.186111	97.961701	-.255432	-3.993***
P6	-266.808333	97.961701	-.174217	-2.724**
P5	-242.100000	97.961701	-.158083	-2.471**
P4	-287.322222	97.961701	-.187612	-2.933**
P3	-424.061111	97.961701	-.276898	-4.329***
P2	-286.552778	97.961701	-.187110	-2.925**
P1	-655.708333	97.961701	-.428156	-6.694***
(Constant)	706.857099	73.016341		9.681***

R^2=.27732 F=13.38799***, df=9/314
adjR^2=.25660
*** ≤ .001
** ≤ .01

Table A25. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1971 Divorce Rate.

Variable	b	SEb	Beta	t
P8	.972222	92.975747	.000902	.010
P7	-425.683333	92.975747	-.394734	-4.578***
P6	-256.872222	92.975747	-.238196	-2.763**
P5	-225.116667	92.975747	-.208750	-2.421*
P4	-452.700000	92.975747	-.419786	-4.869***
P3	-455.633333	92.975747	-.422506	-4.901***
P2	-409.488889	92.975747	-.379717	-4.404***
P1	-634.472222	92.975747	-.588343	-6.824***
(Constant)	743.822222	65.743781		11.314***

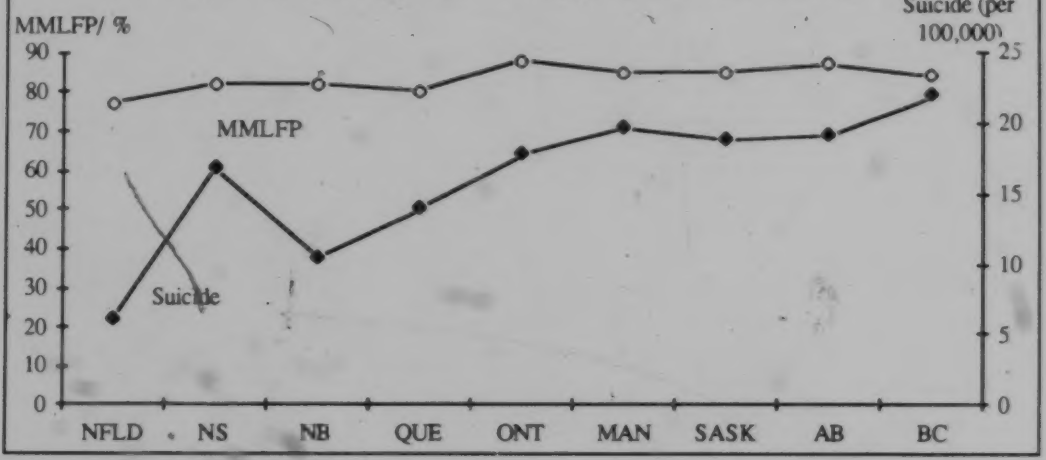
R^2=.36028 F=10.77096***, df=8/153
adjR^2=.32683
*** ≤ .001
** ≤ .01
* ≤ .05

Table A26. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1981 Divorce Rate.

Variable	b	SEb	Beta	t
P8	53.888889	172.797635	.031051	.321
P7	-356.688889	172.797635	-.205524	-2.064*
P6	-276.744444	172.797635	-.159460	-1.602
P5	-259.083333	172.797635	-.149283	-1.499
P4	-121.944444	172.797635	-.070264	-.706
P3	-392.488889	172.797635	-.226152	-2.271*
P2	-163.616667	172.797635	-.094276	-.947
P1	-676.944444	172.797635	-.390055	-3.918***
(Constant)	989.100000	122.186379		8.095***

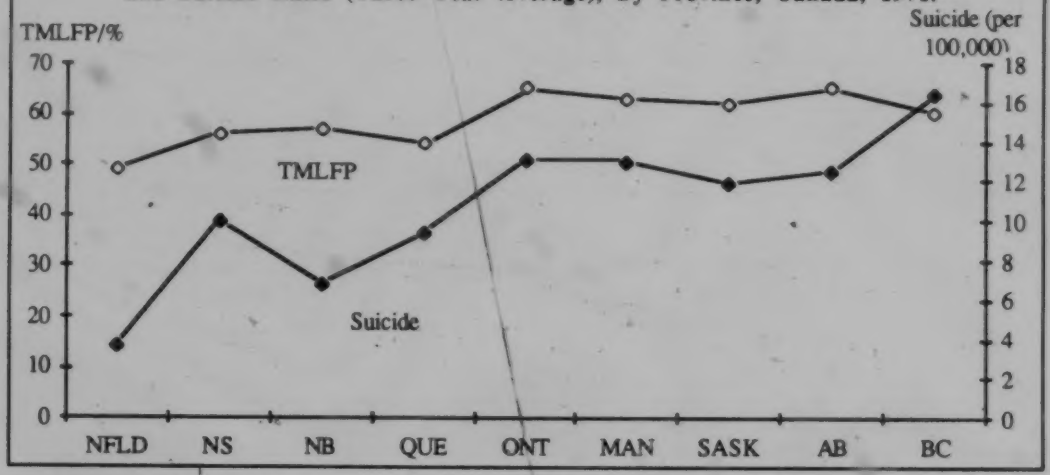
R^2=.14683 F=3.29147**, df=8/153
adjR^2=.10222
*** ≤ .001
** ≤ .01
* ≤ .05

Chart A9: Male Married Labor Force Participation Rates (MMLFP) and Suicide Rates (Three Year Average), By Province, Canada, 1971.



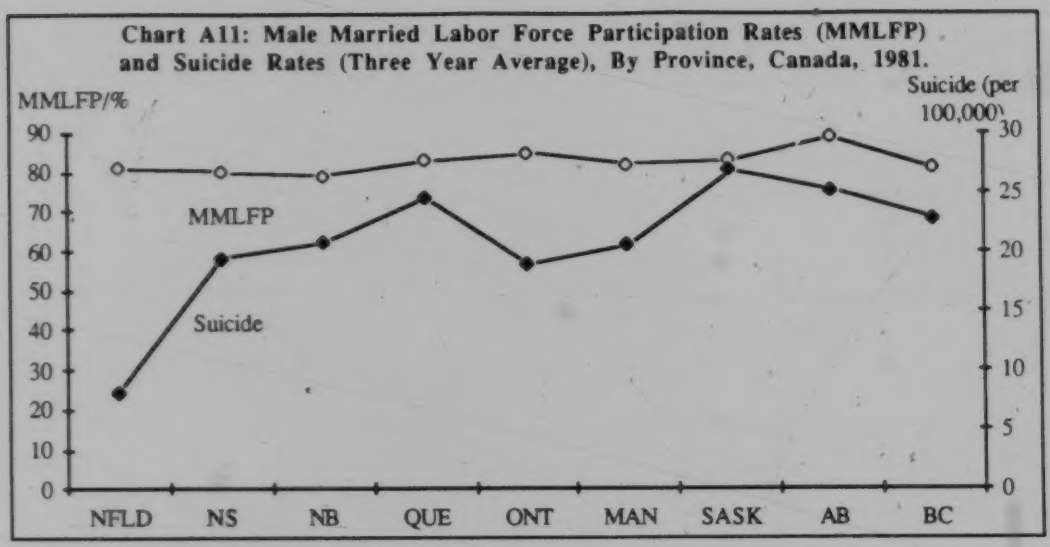
Source: See Tables A15 and A18

Chart A10: Total Married Labor Force Participation Rates (TMLFP) and Suicide Rates (Three Year Average), By Province, Canada, 1971.



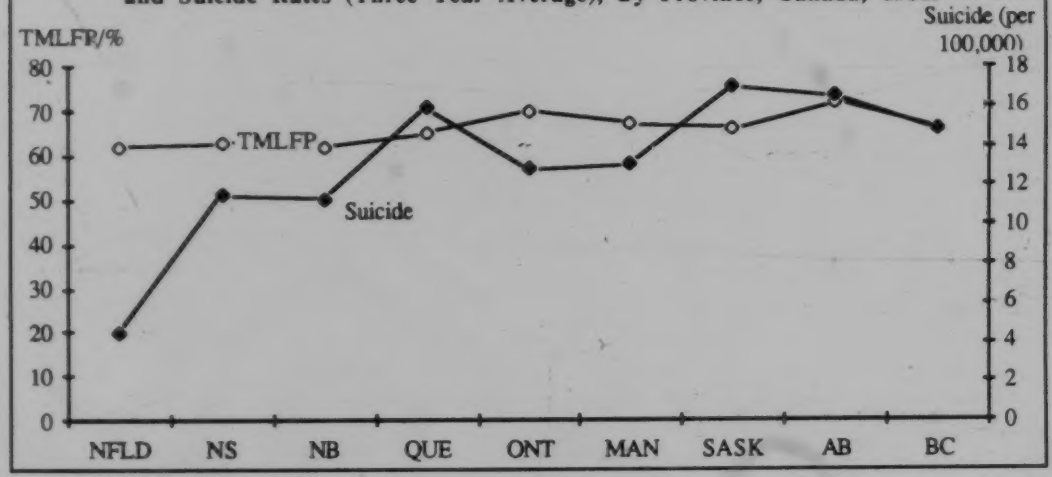
Source: See Tables A15 and A18

Chart A11: Male Married Labor Force Participation Rates (MMLFP) and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A18

Chart A12: Total Married Labor Force Participation Rates (TMLFP) and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A18

Table A27. Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on Married Female Labor Force Participation.

Variable	b	SEb	Beta	t
Time	18.300000	1.243403	.585055	14.718***
P8	3.633333	2.637655	.073010	1.377
P7	.616667	2.637655	.012392	.234
P6	4.683333	2.637655	.094109	1.776
P5	5.366667	2.637655	.107841	2.035*
P4	-7.061111	2.637655	-.141890	-2.677**
P3	-5.122222	2.637655	-.102929	-1.942*
P2	-5.783333	2.637655	-.116213	-2.193*
P1	-14.822222	2.637655	-.297846	-5.619***
(Constant)	38.055556	1.965992		19.357***

R^2=.50381 F=35.42530***, df=9/314

adjR^2=.48959

*** ≤ .001

** ≤ .01

* ≤ .05

Table A28. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1971 Married Female Labor Force Participation Rate.

Variable	b	SEb	Beta	t
P8	5.366667	2.568178	.161177	2.090*
P7	3.122222	2.568178	.093769	1.216
P6	5.566667	2.568178	.167183	2.168*
P5	6.933333	2.568178	.208228	2.700**
P4	-9.055556	2.568178	-.271965	-3.526***
P3	-3.533333	2.568178	-.106116	-1.376
P2	-5.544444	2.568178	-.166516	-2.159*
P1	-16.044444	2.568178	-.481861	-6.247***
(Constant)	37.466667	1.815976		20.632***

R^2=.48801 F=18.22950***, df=8/153

adjR^2=.46124

*** ≤ .001

** ≤ .01

* ≤ .05

Table A29. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1981 Married Female Labor Force Participation Rate.

Variable	b	SEb	Beta	t
P8	1.900000	4.637319	.040986	.410
P7	-1.888889	4.637319	-.040746	-.407
P6	3.800000	4.637319	.081972	.819
P5	3.800000	4.637319	.081972	.819
P4	-5.066667	4.637319	-.109296	-1.093
P3	-6.711111	4.637319	-.144769	-1.447
P2	-6.022222	4.637319	-.129909	-1.299
P1	-13.600000	4.637319	-.293373	-2.933**
(Constant)	56.944444	3.279080		17.366***

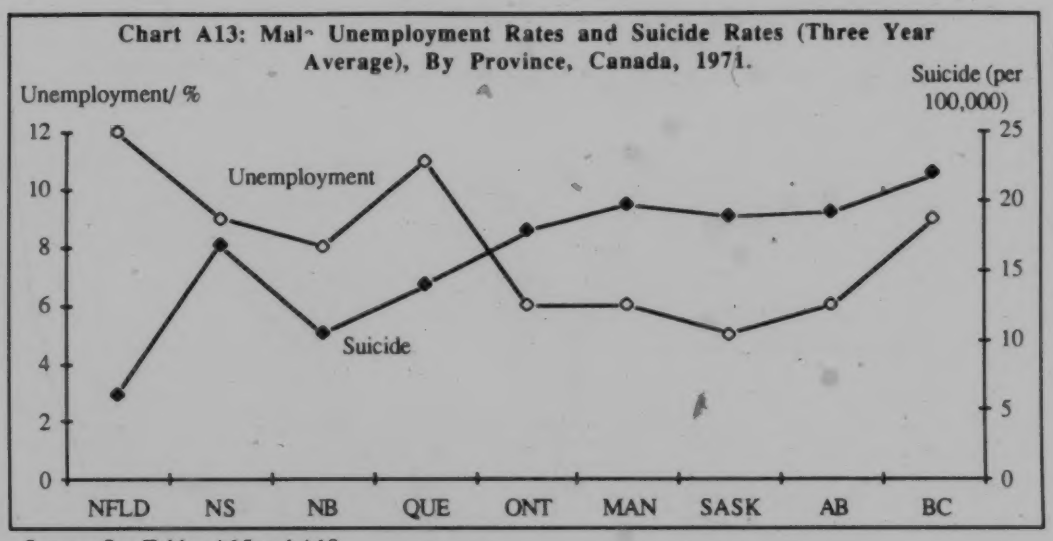
R^2=.13879 F=3.08207***, df=8/153

adjR^2=.09376

*** ≤ .001

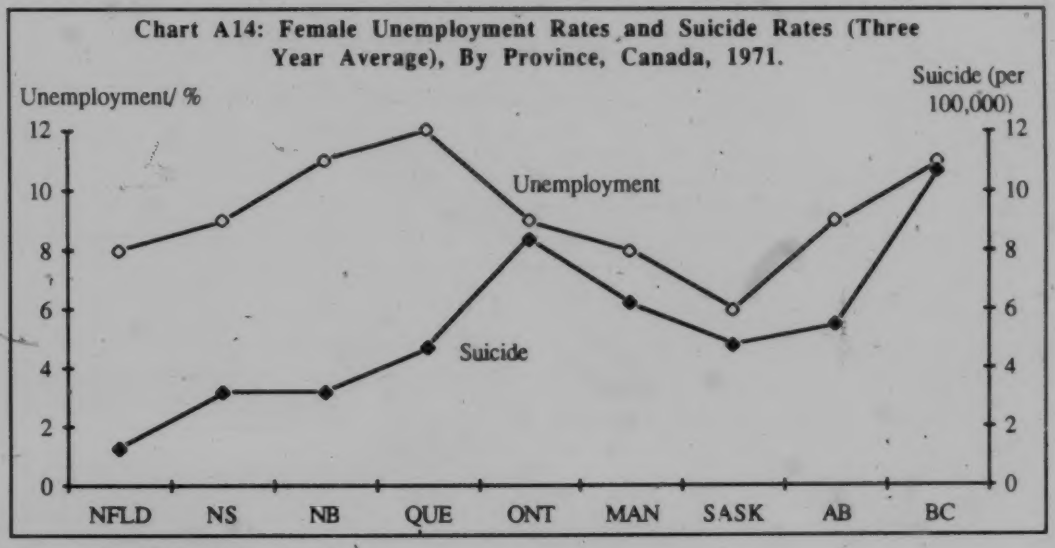
** ≤ .01

Chart A13: Male Unemployment Rates and Suicide Rates (Three Year Average), By Province, Canada, 1971.



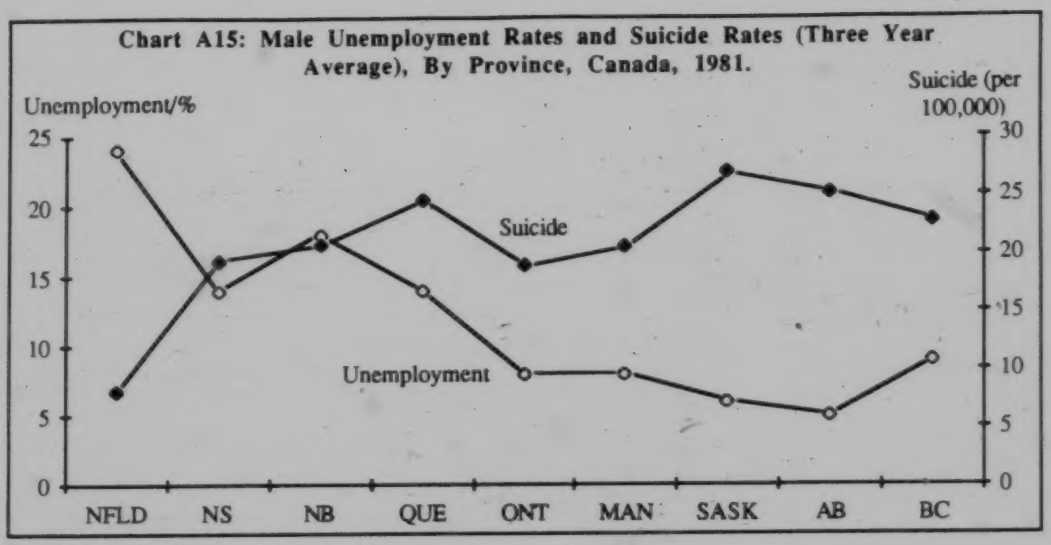
Source: See Tables A15 and A19

Chart A14: Female Unemployment Rates and Suicide Rates (Three Year Average), By Province, Canada, 1971.



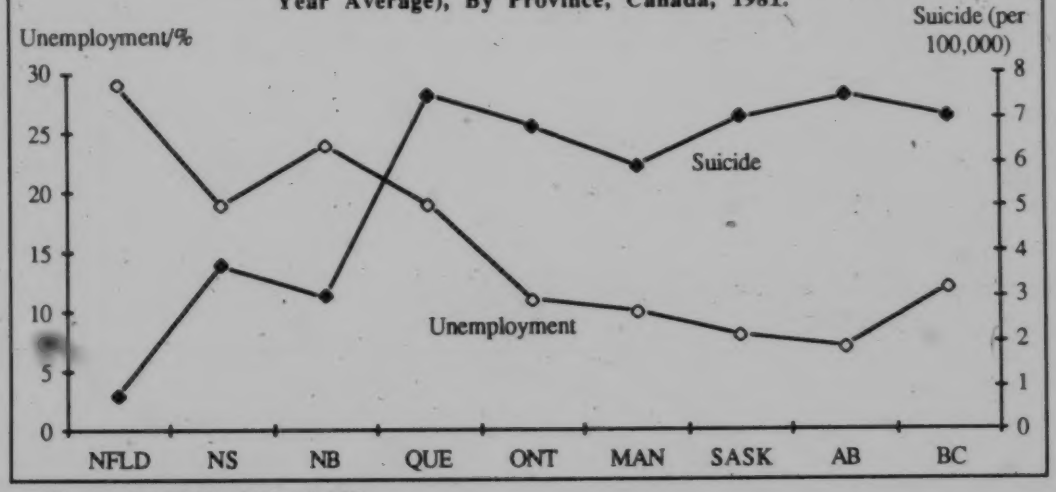
Source: See Tables A15 and A19

Chart A15: Male Unemployment Rates and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A19

Chart A16: Female Unemployment Rates and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A19

Table A30. Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on the Unemployment Rate.

Variable	b	SEb	Beta	t
Time	54.220988	1.295300	.200958	4.031***
P8	-4.061111	2.747747	-.102161	-1.478
P7	-4.258333	2.747747	-.107122	-1.550
P6	-2.500000	2.747747	-.062890	-.910
P5	-1.561111	2.747747	-.039271	-.568
P4	4.369444	2.747747	.109917	1.590
P3	5.150000	2.747747	.129552	1.874
P2	2.897222	2.747747	.072882	1.054
P1	8.263889	2.747747	.207885	3.008**
(Constant)	7.789506	2.048050		3.803***

R^2=.15612 F=6.45439***, df=9/314

adjR^2=.13193

*** ≤ .001

** ≤ .01

Table A31. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1971 Unemployment Rate.

Variable	b	SEb	Beta	t
P8	-3.322222	2.787901	-.124903	-1.192
P7	-5.044444	2.787901	-.189652	-1.809
P6	-3.500000	2.787901	-.131587	-1.255
P5	-2.361111	2.787901	-.088769	-.847
P4	1.733333	2.787901	.065167	.622
P3	-.738889	2.787901	-.027779	-.265
P2	-1.150000	2.787901	-.043236	-.412
P1	-.761111	2.787901	-.028615	-.273
(Constant)	10.394444	1.971344		5.273***

R^2=..05451 F=1.10252, df=8/153

adjR^2=.00507

*** ≤ .001

Table A32. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1981 Unemployment Rate.

Variable	b	SEb	Beta	t
P8	-4.800000	4.592926	-.099762	-1.045
P7	-3.472222	4.592926	-.072166	-.756
P6	-1.500000	4.592926	-.031176	-.327
P5	-.761111	4.592926	-.015819	-.166
P4	7.05556	4.592926	.145602	1.525
P3	11.038889	4.592926	.229429	2.403*
P2	6.944444	4.592926	.144331	1.512
P1	17.288889	4.592926	.359327	3.764***
(Constant)	10.405556	3.247689		3.204**

R^2=.21578 F=5.26220***, df=8/153

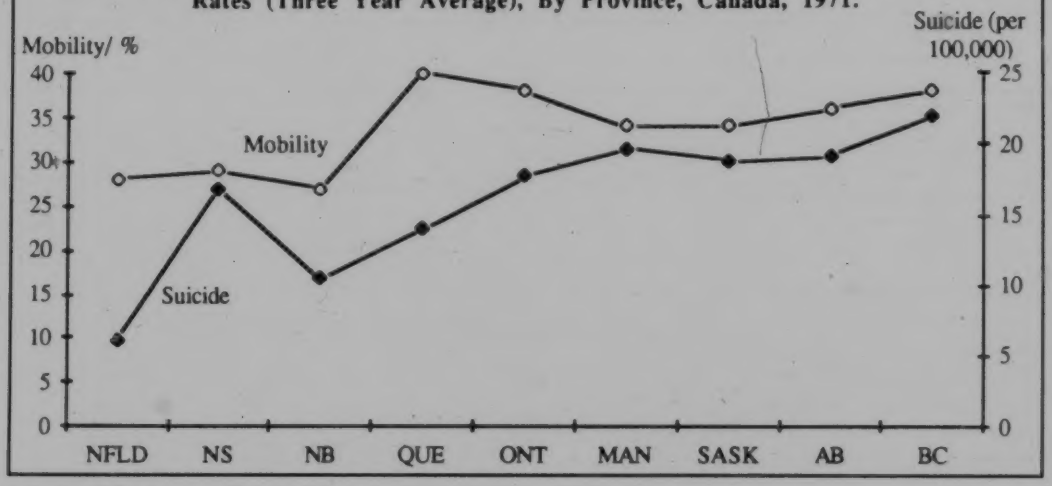
adjR^2=.17477

*** ≤ .001

** ≤ .01

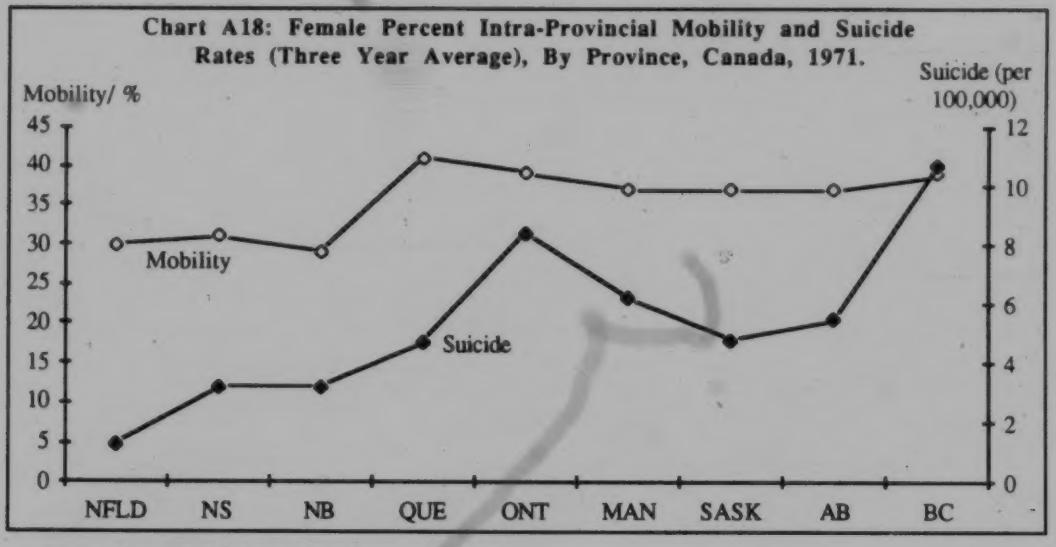
* ≤ .05

Chart A17: Male Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province, Canada, 1971.



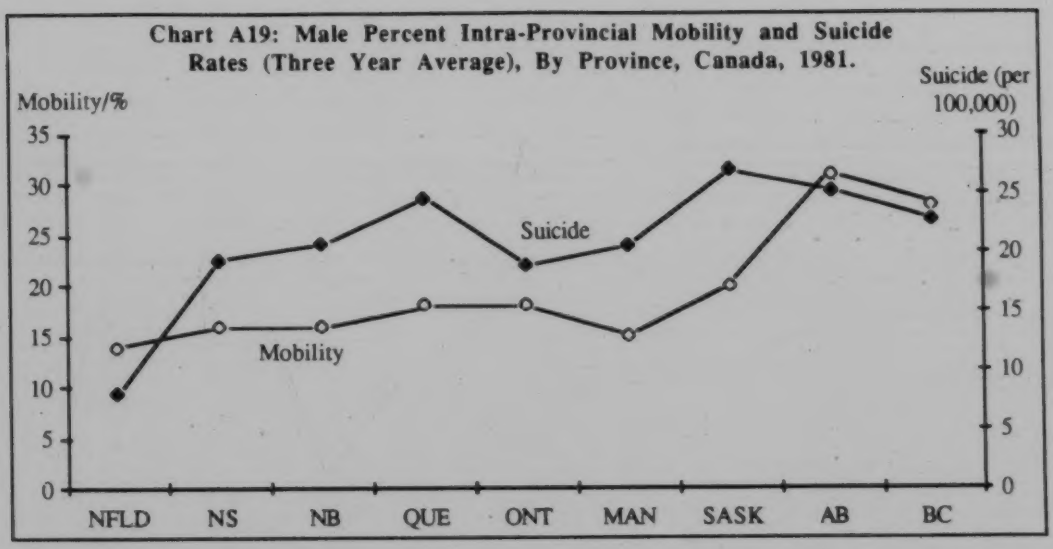
Source: See Tables A15 and A20

Chart A18: Female Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province, Canada, 1971.



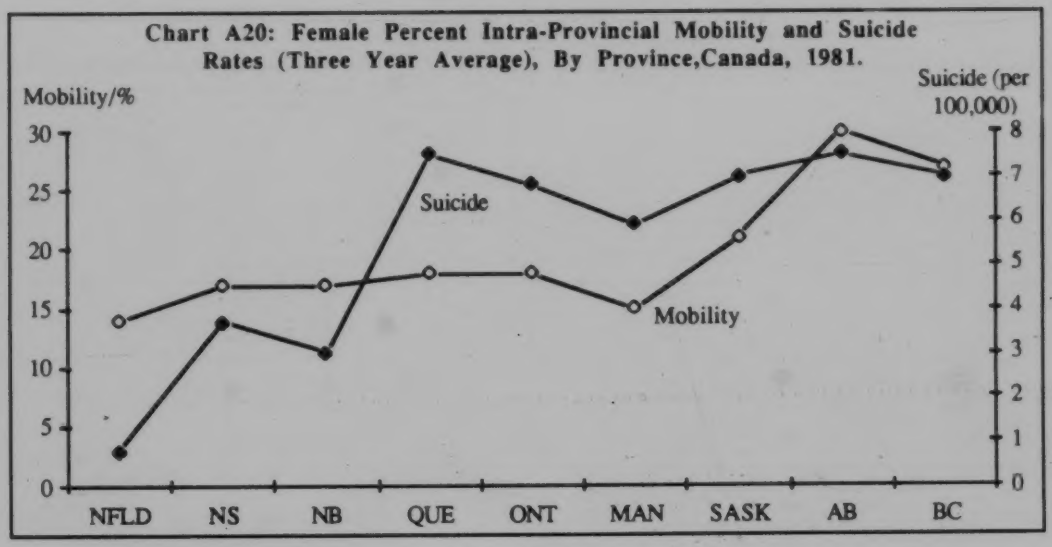
Source: See Tables A15 and A20

Chart A19: Male Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province, Canada, 1981.



Source: See Tables A15 and A20

Chart A20: Female Percent Intra-Provincial Mobility and Suicide Rates (Three Year Average), By Province,Canada, 1981.



Source: See Tables A15 and A20

Table A33. Regression Coefficients for the Effects of Time and the Provincial Dummy Variables on the Intra-Provincial Mobility Rate.

Variable	b	SEb	Beta	t
Time	-15.844444	1.251895	-.557358	-12.656***
P8	-.877778	2.655670	-.019408	-.331
P7	-4.358333	2.655670	-.096363	-1.641
P6	-7.077778	2.655670	-.156490	-2.665**
P5	-4.716667	2.655670	-.104286	-1.776
P4	-4.083333	2.655670	-.090283	-1.538
P3	-10.905556	2.655670	-.241122	-4.107***
P2	-9.211111	2.655670	-.203658	-3.468***
P1	-12.358333	2.655670	-.273243	-4.654***
(Constant)	41.711111	1.979420		21.072***

R^2=.39105 F=22.40484***, df=9/314

adjR^2=.37360

*** ≤ .001

** ≤ .01

Table A34. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1971 Intra-Provincial Mobility Rate.

Variable	b	SEb	Beta	t
P8	-2.738889	4.197628	-.066446	-.652
P7	-2.244444	4.197628	-.054450	-.535
P6	-2.661111	4.197628	-.064559	-.634
P5	-.333333	4.197628	-.008087	-.079
P4	1.527778	4.197628	.037064	.369
P3	-10.411111	4.197628	-.252574	-2.480**
P2	-7.716667	4.197628	-.187207	-1.838
P1	-10.411111	4.197628	-.252574	-2.480**
(Constant)	39.644444	2.968171		13.357***

R^2=.10751 F=2.30377*, df=8/153

adjR^2=.06084

*** ≤ .001

** ≤ .01

* ≤ .05

Table A35. Regression Coefficients for the Effects of the Provincial Dummy Variables on the 1981 Intra-Provincial Mobility Rate.

Variable	b	SEb	Beta	t
P8	.983333	3.182143	.029367	.309
P7	-6.472222	3.182143	-.193293	-2.034*
P6	-11.494444	3.182143	-.343281	-3.612***
P5	-9.100000	3.182143	-.271771	-2.860**
P4	-9.694444	3.182143	-.289524	-3.047**
P3	-11.400000	3.182143	-.340461	-3.582***
P2	-10.705556	3.182143	-.319721	-3.364***
P1	-14.305556	3.182143	-.427235	-4.496***
(Constant)	27.933333	2.250115		12.414***

R^2=.22272 F=5.48000***, df=8/153

adjR^2=.18208

*** ≤ .001

** ≤ .01

* ≤ .05